DOCUMENT RESUME

ED 464 771 RC 023 466

TITLE	Migrant Health Issues. Monograph Series.
INSTITUTION	National Center for Farmworker Health, Inc., Austin, TX.
SPONS AGENCY	National Advisory Council on Migrant Health, Rockville, MD.
PUB DATE	2001-10-00
NOTE	71p.; Preface by Adolfo Valdez. Introduction by Daniel Hawkins. Reviewed by the Migrant Health Branch, DHHS.
AVAILABLE FROM	National Center for Farmworker Health, Inc., 1770 FM 967, Buda, TX 78610. Tel: 800-531-5120 (Toll Free). For full text: http://www.ncfh.org/monograph.htm.
PUB TYPE	Collected Works - General (020)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Allied Health Occupations Education; Child Health; Child Labor; Cross Cultural Training; *Educational Needs; Health Promotion; Human Services; Medical Education; Mental Health; *Migrant Children; *Migrant Health Services; Migrant Housing; *Migrant Workers; Migrant Youth; Occupational Safety and Health; Outreach Programs; Physical Health; Professional Training
IDENTIFIERS	*Access to Health Care; Childrens Health Insurance Program

ABSTRACT

This document contains 10 short monographs on priority issues relevant to the health and well-being of migrant and seasonal farmworkers and their families. An introduction by Daniel Hawkins discusses the important role of migrant health centers in providing primary and preventive health care services to this disadvantaged and underserved population. The monographs are: (1) "Dental/Oral Health Services" (Gina R. Lombardi); (2) "Environmental/Occupational Safety and Health" (Alice Larson); (3) "Medicaid and the State Children's Health Insurance Program" (Elizabeth Arendale); (4) "Mental Health and Substance Abuse" (Joseph D. Hovey); (5) "Outreach Services" (Tina Castanares); (6) "Domestic Violence Services" (Rachel Rodriguez); (7) "Disaster Relief" (Elia Gallardo); (8) "Housing" (Christopher Holden); (9) "Recruitment, Retention, and Training of Bilingual/Bicultural Staff" (Marian McDonald); and (10) "Child Labor" (Shelley Davis). Many monographs include discussions of related health education needs and training of medical and health professionals. (Contains references in each monograph.) (SV)

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Monograph series

Migrant Health Issues

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Preface
by
Adolfo Valdez

Introduction
by
Daniel Hawkins

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001

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Preface

It is with "gran placer" that I introduce this series of monographs, which is produced to help inform all interested parties on the issues that are of greatest importance for the health and well being of migrant and seasonal farmworkers in the United States. The National Advisory Council on Migrant Health has worked closely with the National Center for Farmworker Health for many years in an effort to articulate and document these critical issues for the general public, public health officials, researchers and all other interested parties. Prior collaborative efforts include production of background papers on the Council's 1993 Recommendations (March,1993) and on the 1995 Recommendations entitled *Losing Ground* (September,1995.)

This series of monographs has been produced by the National Center for Farmworker Health, authored by the experts in the topical areas, and reviewed extensively by the National Advisory Council and the Migrant Health Branch of the U.S. Department of Health and Human Services. The topics for this first series were selected in coordination with the Council's priority recommendations to the Secretary of the U.S. Department of Health and Human Services for the year 2000. An ongoing series will be produced through this collaborative effort.

On behalf of the National Advisory Council on Migrant Health, we invite readers to use and share these monographs in their work with our migrant and seasonal farmworkers in the U.S.

Adolfo Valdez
National Advisory Council on Migrant Health
Chairman, 2001

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Introduction

Migrant and seasonal farmworkers are an indispensable asset in the $28 billion U.S. fruit and vegetable industry. Millions of workers help harvest the nation's agricultural products each year, ensuring that families in the U.S. and around the world have access to food at a reasonable cost. Without the continued health and welfare of these committed individuals, food would not be as available or affordable as it is today. Unfortunately, farmworkers remain some of the poorest, most economically disadvantaged working people in the United States. Poverty, combined with a lack of access to many vital public benefits, including health care, housing and fair labor standards, create a set of circumstances that have negatively impacted the well being of farmworkers.

Today, Migrant Health Centers (MHCs) serve over 600,000 people at more than 120 sites across the country. Between 1990 and 1995, funding for the Migrant Health Program increased 25 percent, from $52 million to $65 million. Since being linked to the Consolidated Health Centers program, funding for the MHC program has increased more than 33 percent, to over $87 million in 2000. With an expected increase of $150 million for the Consolidated Health Centers program for FY 2001, funding for the MHC program next year will exceed $100 million for the first time ever. However, while the funding for these centers has increased substantially, MHCs are still able to serve only 20 percent of the target population. Funding must be significantly increased in order to serve more of these disadvantaged workers and their families.

The Community, Migrant, Homeless and Public Housing Health Center programs have a long history of providing primary and preventive health care services to underserved populations. In 2000, health centers served over 11 million people, over 4.5 million of whom had no form of health insurance. The federal grant program has been used to provide health care to those who cannot afford the centers' services and may not have access to the "traditional" health care system. Although funding for the federal grant program for health centers has begun to increase in recent years, there are still millions of uninsured individuals who lack a regular source of care and cannot afford to visit a medical or dental professional. With 40 percent of current patients unable to afford care at health centers, federal funding amounts to 25 percent of current costs. This leaves a funding gap for all health centers to fill through extraordinary means. Unfortunately, this gap is even wider among MHCs.

Although MHC patients are primarily employed on local farms, they are much more likely to be without health insurance. In addition, due to burdensome requirements of the Medicaid program and the more recent State Children's Health Insurance Program (SCHIP), many farmworkers who would otherwise qualify for these programs are excluded, forcing health centers to make up an even larger gap in funding. Because the nature of their jobs require travel between states, migrant farmworkers are frequently unable to qualify for either program.

For less than one dollar per day for each person served (less than $350 annually), health centers provide quality primary and preventive care to low-income, uninsured and under-insured individuals and families. Many studies have shown that health centers are less expensive than private physicians. Through reductions in hospital admissions and less frequent use of costly emergency room visits for routine services, health centers save the American health care system billions of dollars each year. To serve the unique needs of their patients effectively and improve their overall health, most health centers provide health education, community outreach, transportation, and support programs in a linguistically and culturally appropriate setting.

In order to meet the current and future needs and demands of patients, and to move toward the day when all migrant and seasonal farmworkers will have adequate access to health care services, the MHC program funding must be substantially increased.

The National Association of Community Health Centers, together with several other advocacy organizations, has successfully promoted a five-year growth plan for the Consolidated Health Centers program that would double the service capacity of all health centers. Under this plan, called the Resolution to Expand Access to Community Health Centers (REACH) Initiative, funding for the CHC program is expected to exceed $2 billion by FY 2005. The REACH initiative has been endorsed by more than 60 percent of all Members of Congress and by the current presidential administration. Under the REACH initiative, at current funding distributions, the MHC program would receive $172 million in FY 2005 - twice the level of current funding for the MHC program.

It is noteworthy that, even at this increased funding level, MHCs will not be able to serve the entire community of migrant and seasonal farmworkers who need their care. Therefore, funding for the program must continue to increase until every farmworker has access to primary and preventive care through an MHC.

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Monograph series

Migrant Health Issues

Dental / Oral Health Services
by
Gina R. Lombardi

Monograph no. 1

DENTAL / ORAL HEALTH SERVICES

BY

GINA R. LOMBARDI

According to an analysis of migrant health center encounter data, dental disease ranks as one of the top five health problems for farmworkers aged 5 through 29, and remains among the top twenty health problems for farmworkers of all other ages presenting for care. For children aged 10 to 19, dental disease is the chief complaint (Dever, 1991). Over the last eighteen years, numerous local-level studies of the oral health of farmworker children and adults have been conducted. Across both time and geography, the findings consistently show farmworkers of all ages to have a level of oral health far worse than what is found in the general population (Koday, Rosenstein, and Lopez, 1990; Entwistle and Swanson, 1989; Woolfolk, Hamard, Bagramian, and Sgan-Cohen, 1984; Woolfolk, Sgan-Cohen, Bagramian, and Gunn, 1985; Cipes and Castaldi, n.d.). The poor level of oral health for farmworkers was generally found to correspond with lack of access to information that could help prevent oral health problems and lack of access to preventive care and restorative services.

Over the last two decades, the prevalence of dental decay has declined significantly in the general population. This is largely attributed to the success of preventive practices, such as fluoridation of water, improved oral hygiene, and the application of sealants to the teeth of children, in order to protect teeth from decay. This improvement is not reflected in the oral health of farmworker children who experience a rate of dental decay that is approximately twice that of children in the general population (Koday, et al., 1990).

Of 231 adult Hispanic migrant and seasonal farmworkers who participated in a 1986 study in Colorado, 22% had never seen a dentist, and 56% had not received regular dental care. Eighty-five percent indicated that they were in need of dental care at the time of the survey, and the same percentage was found to have one or more decayed teeth. Comparing these data to the Hispanic National Health and Nutrition Examination Survey (NHANES), the farmworkers appeared to exhibit more advanced periodontal disease than other Hispanic groups. Crisis care for emergencies was identified as the typical approach to seeking oral health care. Most participants noted that they would seek care for a variety of oral health symptoms; however, in practice, few actually did so. The factors identified as barriers to accessing care were cost, time factors and perceptions that diagnosis and treatment would be ineffective (Entwistle and Swanson, 1989).

More recently, in 1999, the California Agricultural Worker Health Survey (a population-based study of California farmworkers) revealed that poor dental outcomes persist among farmworkers. In a clinical assessment of 652 adult workers, the study documented that 33.5% showed evidence of at least one untreated decayed tooth (Villarejo, Lighthall, Williams, Souter, Mines, Bade, Samuels and McCurdy, 2000). Thirty percent of male subjects and 37.5% of females presented missing or broken teeth at the time of the physical examination. Gingivitis was the third major dental problem, affecting 14.4% of total subjects. Rates of untreated dental caries, missing teeth, and gingivitis are indicative of a continual inability to access preventive oral health services among this population. The lack of access to care and even inadequate knowledge of how to maintain oral health were shown in utilization rates for 971 workers who completed the main survey instrument. Of these subjects,

49.5% of males and 44.4% of females reported that they had never been to a dentist. As evidenced by subjects' reports of toothaches that lasted up to one year, meeting basic needs for farmworkers often means compromising oral health.

A study in Michigan interviewed farmworker mothers and examined children seeking services from a program coordinated by the University of Michigan to provide oral health care to farmworkers. The study found the percentage of teeth with decayed surfaces for migrant children ages 5-14 in the study group was 65% vs.16% for U.S. schoolchildren of the same age, and the percentage of teeth with filled surfaces was 29% for migrant children compared with 76% for U.S. schoolchildren. The high percentage of decayed teeth combined with a low level of restorative care and indications of oral hygiene neglect lead to the conclusion that the oral health needs of this highly mobile population are not being met adequately and should receive greater attention.

Most of the families in the Michigan study had permanent homes in Texas and were only in Michigan for part of the agricultural season. However, most of the mothers interviewed reported that the care provided by the University of Michigan was the main source of dental care for their children. Through the rest of the year treatment would only be sought for emergencies (Woolfolk, et al., 1984; Woolfolk et al., 1985).

The Centers for Disease Control and Prevention (CDC) coined the umbrella phrase Early Childhood Caries (ECC) for the many patterns of dental decay in primary dentition (i.e., baby teeth). The effects of ECC are both immediate and far-reaching. ECC can cause severe pain, infection, abscesses, chewing difficulty, malnutrition, and gastro-intestinal disorders and can also lead to poor speech articulation and low self-esteem. ECC is particularly prevalent in children from low-income families, for whom the cost of dental care is prohibitive (Ramos-Gomez, Tomar, Ellison, Artiga, Sintes, and Vicuna, 1999). ECC has been found to negatively impact learning potential and academic performance of children because pain interferes with their ability to concentrate, and in severe cases to maintain nutrition. Without insurance benefits, many farmworker children are left without care and continue to suffer the pain and irreversible progression of dental disease (Good, 1992).

Studies focusing on Baby Bottle Tooth Decay (BBTD), a particular type of ECC, found high rates of decay among farmworker children. BBTD is a disease of young children, characterized by a distinctive pattern of severe tooth decay in the primary dentition. BBTD has been associated with the practice of lulling babies to sleep with a bottle of milk or sweet liquid. The practice allows liquid to pool in the mouth, which can promote decay. Treatment of severe BBTD, especially for children less than 2½ years of age, requires physical restraint, sedation or general anesthesia, and sometimes hospitalization, it can be very expensive. The prevalence of BBTD in the general population is 5% or less, while among disadvantaged urban children it was found to be 20%. In a study of 125 farmworker children under the age of 4 in Yakima, Washington, published in 1992, 29.6% of the children had BBTD (Weinstein, Domoto, Wohlers, and Koday, 1992). This rate is almost 30% higher than that found in populations of urban poor and 5 times higher than that of the general population.

One of the reasons for the broad disparity between the oral health of farmworkers and that of the rest of the population is that farmworkers typically do not seek care unless they have an oral health emergency (Entwistle and Swanson, 1989). Preventive applications and health education to promote prevention are not part of emergency care. Most oral health prevention education is conducted during the course of visits to the dentist for check-ups and cleanings. In other words, prevention is put into practice through the delivery of care that farmworkers usually do not receive.

Such findings have prompted researchers in the area to ask why, after more than a quarter of a century of federal funding for oral health care for farmworkers, their oral health status remains so poor. The simple answer is that the federal funding provided has not been sufficient to create an adequate number of access points for farmworkers to obtain affordable oral health services. In addition, some of the access points that have been created are not funded at a level that makes it possible for them to provide comprehensive oral health services (i.e., health education or cleaning services may be available, but the clinic may not have

a dentist) (National Migrant Resource Program, 1990). Those migrant health centers that have managed to establish dental programs that provide comprehensive care often have long waiting lists because there is such heavy demand for their service. The need for farmworker families to relocate for employment means that they may have to move out of the service area before they can benefit from available programs. This caused one researcher to note that farmworker children may be screened, but often do not receive comprehensive oral health treatment after their needs have been determined (Cipes and Castaldi, n.d.).

Access alone is not enough. The health care provider must be able to understand farmworkers' language, as well as the cultural assumptions and practical circumstances that influence their worldview and the actions they choose to take. Cultural and linguistic competence on the part of health care providers is essential in encouraging farmworkers to seek healthcare when they need it and in helping them understand and implement preventive measures to improve their own health and that of their families.

The case of BBTD illustrates the importance of having healthcare providers who are culturally and linguistically competent to work with farmworkers. It also highlights the importance of assuring that health care providers working with farmworkers have an understanding of the essential circumstances created by the culture of agricultural labor. The recommended practice to prevent baby bottle tooth decay is to give the baby only water in the bottle, or preferably, to wean the child from the bottle completely. It is often assumed by practitioners that parents fully understand that the benefit to the long-term health of the child will offset the days or weeks of crying of an angry baby not willing to give up the bottle. It is important here to have an understanding that practical necessity and cultural expectations may make it either impractical or undesirable for families to comply with the advice of the health care practitioner.

The incidence of BBTD in poor families has been associated with the fact that working parents are exhausted at the end of the day. In the case of farmworker women, it has been documented that they usually have primary responsibility for household tasks and childcare following a full day of hard physical labor in the fields (Rodriguez, 1993). Allowing babies to fall asleep with the comfort of milk or sweet juice in the bottle makes it possible for the parents to attend to other needs. Although early weaning is socially acceptable and desirable in Anglo culture, other cultures do not view it as an acceptable child rearing practice. Thus, working poor Hispanic farmworker parents may feel guilt at the prospect of weaning their child at what is perceived to be an early time. Living in overcrowded housing and labor camps, they may also be unwilling, or from a practical standpoint, unable to engage in a practice that could cause the infant to cry through the night and prevent household members and neighbors from sleeping.

The BBTD study concluded that the lack of access to care resulted in farmworker dental visits once every 2.8 years. This resulted in low levels of knowledge, or as the author put it "low dental IQ," underscoring the need both for oral health education for farmworkers and culturally acceptable alternatives to risk behaviors (Weinstein, et al., 1992).

When migrant health centers are able to provide comprehensive dental services in adequately staffed clinics, a positive health outcome has been documented in at least one study. In 1988, the Yakima Valley Farmworkers Clinic in Yakima, Washington maintained a dental clinic staffed with five dentists to serve farmworkers in a three county area. The clinic provided direct patient care and also organized a community prevention program. In a report authored by the clinic's dental director, the ability of the clinic to staff the dental program was due in large part to the assignment of National Health Service Corps (NHSC) dentists. The NHSC is a valuable mechanism for recruiting healthcare professionals to migrant health care. For decades, many of the 121 Migrant Health Center grantees have had to depend on the placement of health care professionals assigned to them by the NHSC in order to maintain an adequate clinical staff. One of the main reasons for this dependency is that many migrant health centers are located in rural areas where it is difficult to pay salaries that are competitive with those offered in urban locations. A benefit of

NHSC assignments is that they encourage the choice of primary care as a career focus over specialty care which is generally more lucrative for the health care professional.

The Yakima Valley study examined 216 Hispanic children who were all members of migrant farmworker families. Although the children evidenced a much higher rate of decay than children in the general population, the farmworker children in this study also had higher rates of filled teeth and teeth protected by sealants than children in the general population. The inference was that the availability of access to affordable restorative services and prevention in the form of sealants was having a positive health impact on the children in the Yakima Valley Farmworkers Clinic service area (Koday, et al., 1990).

It is important to note that farmworkers do not choose to forego dental care. When affordable care is made available during hours when families can attend, in locations they can reach, and with providers with whom they can communicate, they will seek it. This is evidenced in the findings at Yakima as well as those in Michigan, where families from distant homebase areas obtained care at upstream clinics (Koday, et al., 1990; Woolfolk, et al., 1984; Woolfolk, et al., 1985). Far from being noncompliant, farmworker families will literally go to great lengths to obtain health care.

Involving students through their academic institutions in programs to serve farmworkers can have the dual benefit of promoting migrant health as a career option and giving students practical training in cultural competency and health care delivery to underserved populations. An example of this is the program implemented in 1990 by the Colorado Migrant Health Program. Local dentists, dental school students, and recent graduates participated in program that placed the students in the offices of dental preceptors in order to augment rural dental manpower during the high-impact agricultural season.

Another successful approach to coordinated services was implemented by the Children's Dental Project of Santa Cruz County, California. The concept for the project was developed by a Clinical Nurse Specialist who coordinated collaboration between the county health department, local dentists, the dental hygiene department of the local community college, and the county's maternal and child and adolescent health advisory board to address the oral health problems of farmworker and other low-income children. Coordinating available community services made it possible for families to gain access to quality care at a price they could afford (Ramos-Gomez, et al., 1999).

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Environmental / Occupational Safety and Health

by
Alice Larson, Ph.D.
Larson Assistance Services
Vashon Island, Washington

Monograph no. 2

Environmental / Occupational Safety And Health

BY

Alice Larson, Ph.D.
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Vashon Island, Washington

Many injuries and illness associated with employment in agriculture have been documented through the years (Wilk, 1986; Villarejo and Baron, 1999; Von Essen and McCurdy, 1998). Those employed in this occupation are at much greater risk of death than workers in every industry except construction. Agricultural crop and livestock production, combined with agricultural services, accounted for 13% of all occupational deaths from 1994-99, while only covering 2% of overall employment (Bureau of Labor Statistics [BLS], 2000).

Risks occur through work-related conditions, use of equipment and chemical exposure. The results can be seen in illness-related acute and chronic conditions, in severe disabilities, and in fatalities. Workers, their families, and particularly their children can be affected both at the work site and from contamination brought home.

The National Institute of Occupational Safety and Health (NIOSH) convened a panel of experts in 1995 to set occupational health priorities for agricultural workers (National Institute of Occupational Safety and Health [NIOSH], 1995). The following areas emerged as concerns:

Ergonomic conditions/musculoskeletal injuries
The heavy lifting, awkward body posturing, twisting and repetitive tasks of agricultural work lend themselves to the development of musculoskeletal injuries that can present acute problems and long-term disabilities for farmworkers. Contributing factors include poorly designed tools, lack of training, and long work hours. Most studies asking farmworkers about their health uncover a high level of backaches and other chronic conditions that cause lost work days, constant pain and difficulty moving (Villarejo et al., 2000; Strong and Maralani, 1998; Estill and Tanka, 1998; Palmer, 1996; Mines, Mullenax, and Saca, 2001).

(Back and neck pain were the most common types of chronic pain workers experienced. Over 40% of these workers left or changed jobs because of the pain they experienced.)

Traumatic injuries
Falls, cuts, amputations, and other injuries are commonplace in agricultural production (BLS, 2000; McDermott and Lee 1990; Schenker, Lopez, and Wintermute, 1995; Myers, 1997; Studeland, Mickel, Cleveland, et al., 1995; Mines et al., 2001). Individuals working full days under stressful conditions are more prone to accidents. When injuries occur, they can be severe. Examples include crushing from farm equipment, accidental slicing with hand labor tools, and falling from ladders. Farmworkers have little training in accident prevention. The prevalence of children in the field — either because no alternative care sites are available or because they are themselves involved in agricultural tasks — can also lead to fatal or life-altering accidents (Wilk, 1993). Transportation to and from work sites

often occurs in unsafe and/or overcrowded vehicles.

(31% of all injuries were due to falls.)

Respiratory problems
Agricultural work includes constant exposure to respiratory irritants, including pesticides, dust, plant pollen, and molds. Workers performing tasks may have their faces close to, or for some activities can literally be engulfed in, such irritants, constantly breathing in particles that can cause respiratory difficulties. Other workers, for example in nursery/greenhouse operations or mushroom production, work in enclosed spaces that may be poorly ventilated. Often these conditions are exaggerated through smoking. The results can be chronic respiratory illness, including allergies, bronchitis, and asthma (Scheneker, Ferguson, and Gamsky, 1991; Von Essen, 1993; Garcia, Dresser, and Zerr, 1996).

Dermatitis
Skin problems are extremely common among those who work the crops. These can be caused by plants that scratch the skin, by allergic reactions, by exposure to chemicals, or by other causes related to agricultural production (Hogan & Lane, 1986; O'Malley, 1997). A recent study found close to half of tobacco workers interviewed said they experienced the symptoms of green tobacco sickness at least once while working the season. This illness is related to dermal exposure to wet tobacco (Quandt, Arcury, Preisser, Norton, and Austin, 2000). Figures from the Bureau of Labor Statistics show almost half of all reported occupational illnesses within agriculture are associated with skin diseases or disorders (BLS, 2000). A 1990 study by the Migrant Clinician's Network found dermatitis to be the primary cause for patient visits to four migrant health centers among male farmworkers in their twenties (Dever, 1991). Most physicians are not trained to treat agriculturally-related dermatitis and have little experience identifying the cause of problems. Workers are hesitant to seek medical help for these conditions until they reach extreme levels.

Infectious diseases
Both the NIOSH Work Group charged with prioritization of farm worker occupational health and safety issues and the recent review on the occupational health status of farmworkers (Villarejo et al., 1999; NIOSH, 1995) categorize infectious diseases as related to agricultural employment. Tuberculosis and parasitic diseases are attributable to deficient sanitation both at work and at residence sites, poor quality drinking water and failure to provide uncontaminated washing and drinking water (Wilk, 1993; Ciesielski, Seed, Ortiz, and Metts, 1992; Jacobson, Mercer, and Simpson, 1987). Seasonal agricultural workers, due to lack of economic resources, must live in deficient housing or overcrowded conditions that are conducive to unhealthy living situations (Sherman, Villarejo, Garcia, et al., 1997; Larson, 1995). These conditions all contribute to the spread of communicable disease.

Cancer
A high incidence of cancer is suspected but not well documented among the farmworker population. Agricultural workers are exposed to known cancer-causing chemicals, and studies find a high prevalence of breast cancer, brain tumors, non-Hodgkin's lymphoma, and leukemia within agricultural communities. Constant exposure to the sun can promote skin cancer within workers (Blair and Zham, 1991; Zham and Blair, 1993). Because farmworkers are mobile, live and work within numerous and varied situations, and may move in and out of agricultural work, the long-term studies necessary to investigate cancer prevalence have been lacking with this population.

Eye problems
A health issue for farmworkers recently receiving more attention is eye problems. Several reports

have documented the prevalence of eye complaints and eye-related visits to health facilities (Villarejo et al., 2000; Myers, 1997; Hall, Cartwright, & Hunter, 2000; Centers for Disease Control and Prevention, 1995; Mines et al., 2001). Similar to dermatitis causing agents, farmworkers are exposed to potential eye irritants as they work including dust, pollen and chemicals. Untreated chronic eye problems can lead to serious damage (NIOSH, 1995); tree branches and accidents with agricultural tools can cause abrasions. Most Migrant Health Centers do not have an ophthalmologist on staff, and therefore may face difficulty offering comprehensive treatment.

(Itchy eyes were the most common complaint among pesticide sprayers as well as nonsprayers.)

Pesticide Exposure

Farmworker exposure to pesticides and the potential for health-related effects are probably the most documented and researched area within agricultural occupational health; yet, so many related hazards remain unknown and research left undone. The use of agricultural chemicals and required employee training are highly regulated covering all aspects of protection and education; yet so much remains unenforced and workers continue to be employed in hazardous situations. Even the extent to which these issues pose a problem is unclear due to underreporting and lack of clinician training.

It seems every review of occupational health issues in agriculture lists pesticide exposure as a potential hazard (Wilk, 1986; Villarejo et al., 1999; Von Essen et al., 1998). The Environmental Protection Agency (EPA) regulates the use of such chemicals and has laid out strict guidance for their development, sale, hazard classification and use. The potential for acute poisoning is well documented based on lethal effects on test animals, and research has shown the results of exposure to workers in the manufacturing process and to applicators for individual chemicals. The effects of long-term exposure are less well documented, although some pesticides are clearly carcinogenic (Purschwitz and Field, 1990).

Almost all research on pesticides used in agriculture tracks a single chemical. What is not known and continues to lack research is the effect of continuous exposure to a variety of pesticides. Additionally, little research has been done on the interaction of one pesticide on another, or on the adherents used within the pesticide formulation, many of which themselves may be hazardous (Simcox et al., 1999; Shaver and Tong, 1991; Moses, 1989). It is these topics that are the most relevant to farmworkers, as they are exposed to not a single pesticide but to multiple pesticides of various classifications, and to a variety of doses over an extended period of time. Pesticide-related research in this area is very difficult, as cause and effect are rarely clear, leaving conclusions of any sort muddy (Mobed, Gold, and Schenker, 1992).

The EPA and the Occupational Safety and Health Administration (OSHA) regulate pesticide production and application, and both agencies require that workers be given pesticide related information (U.S. Department of Labor, Occupational Safety and Health Administration, 1987) and receive comprehensive training, particularly for those involved in pesticide handling (Environmental Protection Agency [EPA], 1988). A recent study found that, despite improvements in training and certification of workers following the Worker Protection Standard, a significant number has not received training (Mines et al., 2001). Several studies have determined these laws are not enforced; workers are not receiving required training or are subject to ineffective educational techniques (Larson, 2000; Perry and DiFonzo, 1998; Arcury et al., 1999; Columbia Legal Services, 1998; Davis and Schleifer, 1998). The result is that agricultural workers are often ill

prepared to protect themselves from the potentially hazardous chemicals around them.

The Worker Protection Standard also requires workers to be afforded assistance if pesticide exposure should occur. This includes transportation to the nearest health facility and cooperation with medical providers in offering information about the chemicals to which they may have been exposed (EPA, 1988). However, it is not clear whether this is occurring, and there have been anecdotal reports of employers who are not forthcoming with information that can make a difference in patient care (EPA, 1997).

Clinicians receive little training in recognition and treatment of pesticide-related illness which, in many instances, might present as flu-like symptoms. The health facility may not take a work history of patients that can serve to alert providers to possible exposure. Clinicians may lack knowledge that can relate symptoms to diagnosis and may actually discount workers' protestations in this regard (Mobed et al., 1992; Meggs and Langley, 1997). The chronic effects of association with pesticides, such as cancers, neurological problems, miscarriages, and impotence, are treated without considering long-term exposure to pesticides as a potential cause.

Often what is heard is that there is no problem with exposure to pesticides because there is little reporting of incidents. Even in states with mandatory reporting of suspected pesticide-related illness, there is a sense that not all incidents are recognized and reported (Pesticide Incident Reporting and Tracking Review Panel, 2000; Pesticide Analytical and Response Center, 1999). This has been attributed to physician's failure to recognize pesticide-related illness or to their hesitancy to report for fear of community retribution. Other causes may be employers discouraging their workers from using the health care facility, claiming "everything is reported as pesticide exposure," and worker unwillingness to seek health care or report exposure incidents for fear of retaliation (Schnitzer and Shannon, 1999; Mobed et al., 1992).

Although much still remains to be done, there are a few positive things on the horizon that might help with some of these issues. Many states are developing a uniform surveillance system for reporting of pesticides that would include common data elements and procedures. This may be able to provide more information regarding pesticide exposure and problem chemicals and situations (Schnitzer and Shannon, 1999).

The Bureau of Primary Health Care, in conjunction with the Office of Migrant Health, has undertaken a "Pesticide Collaborative" as a way to develop a model for prevention, recognition and treatment of pesticide-related illness that can be effectively instituted within a migrant health setting.

The EPA has begun a year-and-a-half national comprehensive effort to assess the effectiveness of the Worker Protection Standard that will look at broad issues such as training, enforcement, complaint and retaliation, communication, and information exchange. The result will be recommendations for changes to increase effectiveness, possibly including revisions to the legislation itself.

AmeriCorps Volunteers are being placed in community-based organizations to focus on worker pesticide health and safety training. Half of these are located in Migrant Health Centers.

Other hands-on pesticide safety training programs have been developed, many of which focus on train-the-trainer techniques to teach community members how to educate others (Weinger and Lyons, 1992). The use of lay health workers as

educators seems to be particularly effective in providing this safety-related information to farmworkers.

States are beginning to recognize the need for bilingual/bicultural investigators for gathering information about suspected pesticide-related incidents. These individuals are better able to talk directly to farmworkers and are more adept at winning the trust needed to obtain the information necessary to conduct a thorough investigation.

One of the most interesting and potentially far-reaching cooperative efforts recently undertaken to address some of the fundamental problems associated with helping farmworkers avoid potential problems and treat actual pesticide exposure is the development of "Pesticides and National Strategies for Health Care Providers." This effort of the EPA, the Health Resources and Services Administration, the U.S. Department of Labor, and the U.S. Department of Agriculture is based on the idea all health providers should "possess a basic knowledge of health effects related to pesticide exposures and an ability to take action to ameliorate such effects through clinical and preventive activities" (EPA, 2000). The implementation plan looks at three specific targets: educational settings, practice settings, and resources and tools. It establishes strategies for each area. The document emphasizes that activities are needed at every level of health provider interaction and must involve a variety of agents using broad implementation approaches. Only in this way can long-term results be accomplished.

The draft plan of this document will become final in 2001 and be introduced to a wide range of stakeholders to secure their endorsement. Funding will then be sought for implementation of various components and training begun for health professionals and students.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Medicaid and the State Children's Health Insurance Program

by

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Monograph no. 3

MEDICAID AND THE STATE CHILDREN'S HEALTH INSURANCE PROGRAM

BY

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Farmworkers are a mobile, high risk, working poor population thought to have the worst overall health status in the nation. The annual income of most farmworker families falls below 100% of the federal poverty level (Dever, 1991). For this reason, enrollment screening for the State Child Health Insurance Program (SCHIP) defaults most farmworkers to the Medicaid program. Eligible farmworkers underutilize the Medicaid and SCHIP as well as other social programs. "Looking at major programs ... 20 percent used Medicaid and Food Stamps, 11 percent used WIC, and 5 percent received some kind of cash payment" (Mines, Gabbard, and Steirman, 1997, p. 30).

Over the last five years, the terms reciprocity, portability and presumptive eligibility have become part of the vernacular of advocates and agencies focusing on migrant health. However, the challenge of migrant and seasonal farmworker access to Medicaid has not changed significantly. "Regretfully, participation of eligible farmworkers continues to be impeded by the state-based structure of the system, by eligibility requirements which are not uniform, and by benefits which are not portable" (*Losing Ground*, 1995). In addition, the Personal Responsibility and Work Opportunity Act of 1996 with its resulting change to immigration laws, has added to the confusion on the issue of public charge, creating the perception that all immigrants are ineligible for publicly funded healthcare. This has discouraged qualified immigrant farmworkers from seeking coverage under Medicaid or the SCHIP enacted in 1997. It is also important to note that based on income, most migrant and seasonal farmworkers will default to the Medicaid program. However, farmworkers continue to be subject to the same barriers to participation they experienced 35 years ago.

In embracing SCHIP, states had options to create a separate program, expand Medicaid, or create a hybrid of the two (part separate/part Medicaid expansion). This has further compounded issues of potential reciprocity between states. The low rate of farmworker participation is attributed to health systems' problems in the regulation and administration of child health insurance programs. Despite the eligibility of many of these vulnerable workers [farmworkers] and their dependents for coverage under the numerous Medicaid expansions, their specific characteristics and high mobility have often prevented enrollment (Wright, Fasciano, Frazer, Hill, Zimmerman, and Pindus, 1993). Stated in different terms, "Many workers are simply not eligible for Medicaid – either because they are categorically excluded, or because they do not meet Medicaid state residency requirements" (Wright et al.).

Key concepts associated with the SCHIP are "simplification" and "streamlining enrollment." The Centers for Medicare and Medicaid Services (CMS) (formerly the Health Care Financing Administration [HCFA]), has supported and encouraged Medicaid simplification as demonstrated by their section 1115 waivers under SCHIP. However, not many states are taking advantage of this. The §1115 of the Social Security Act "authorizes the Secretary of HHS to waive otherwise applicable requirements of federal law to permit demonstrations that further program objectives" (Rosenbaum, personal communication, October 20, 2000). Under

SCHIP, if the state adopts at least three of the proposed enrollment simplification or streamlining options it may apply for a §1115 waiver. These options include: the elimination of face-to-face interviews, elimination of the assets test, joint application for SCHIP and Medicaid, presumptive eligibility, 12-month continuous eligibility, and allowing self-declared income. This option is intended to simplify state Medicaid programs.

State regulatory policies often create barriers to farmworker participation by failing to accommodate the special access needs of farmworkers in their planning processes. Under Medicaid and SCHIP statutes, each state program has its own rules and standards, and is often subject to careful oversight by a variety of legislative, executive, and budget controls. In states where counties provide administrative direction of eligibility, an additional complexity is introduced. And in the case of families who move between and among states, the potential need to work with other states adds a special complexity (Moore, 2000).

Once farmworkers are successfully enrolled, their benefits must be made portable. Currently, out-of-state billing processes are slow and cumbersome, with risk of the provider not being paid at all, and offering little incentive for out-of-state providers to accept migrants as patients (Kenesson, 2000). Special efforts to overcome access barriers are required at the community, state and national levels if enrollment efforts are to be successful in allowing farmworker participation in both the SCHIP and Medicaid programs.

In 1995, the National Advisory Council on Migrant Health proposed two recommendations: 1) a nationally administered program to provide health care for farmworkers, which would preclude the problems occurring in the individually administered state programs; and 2) creation of a cooperative demonstration project sponsored by the Centers for Medicare & Medicaid Services and the Migrant Health Branch, Bureau of Primary Health Care (BPHC), Health Resources and Services Administration (HRSA), to facilitate interstate reciprocity of Medicaid benefits through the use of an interstate enrollment transfer model (Losing Ground, 1995). Six years later, neither of these recommendations have been implemented, although as of March of 2001 the California Primary Care Association has initiated a project to study the possibility of establishing the reciprocity model between California, Oregon and Washington. This demonstration project is based on the findings of the 1993 report: "Feasibility Study to Develop a Medicaid Reciprocity Program for Migrant and Seasonal Farmworkers," conducted by Mathematica Policy Research, Health Systems Research and The Urban Institute.

It is important to highlight that one state took the lead in farmworker access to Medicaid as a result of the study conducted by the Mathematica Policy Research, Health Research Systems and the Urban Institute. In May of 1997, the Wisconsin legislature passed a bill creating a model program for migrant farmworkers, by accepting out-of-state Medicaid cards for this population. "Farmworkers in Wisconsin will simply show their out-of-state Medicaid card along with proof of agricultural work" (National Conference of State Legislatures (NCSL), 1997). Their rationale being "Although many farmworkers and their families are eligible for Medicaid, time-consuming procedures, lack of reciprocity among states and other barriers prevent enrollment" (NCSL, 1997).

Other organizations working towards continuity of care for farmworkers continue to work on creative solutions such as a national federally administered program, while at the same time taking advantage of the SCHIP and the CMS support for simplification processes as a partial solution towards that overall goal. One creative idea includes the Texas Association of Community Health Center's effort to develop a portable private provider (PPO) model. The Texas PPO model will be piloted between Texas and four other states (to be determined) as a result of the passing of Texas House Bill (HB) 1537. HB 1537 was signed into law by Texas Governor Rick Perry on June 11, 2001 with an effective date of September 1, 2001. In this model the state of Texas would pay the Texas Medicaid fee for service rates to providers enrolled from the selected pilot states.

The latest and most complete piece of research on this topic, "Improving Health Service Access for Medicaid-Eligible Migrant Farmworkers," by Mary S. Kenesson of Health Policy Crossroads for the Center for Health Care Strategies, Inc. (September 2000), discusses

potential options to solve the problems at hand. One of these options is the highly discussed inter-state reciprocity model. This model gained popularity with the 1993 *Mathematica Study*. Six years later, Kenesson notes that there is a growing realization that reciprocal eligibility, coverage and payment arrangements among two or more state Medicaid programs would be an extremely problematic approach to addressing policy and access barriers for migrant farmworkers. In addition, the advent of SCHIP and the federal and state emphasis on simplified enrollment, outreach, and program design has led to a greater variety in state programs, which seems less conducive to reciprocity models that rely on negotiated commonalities in eligibility, benefit packages, payment structures and administrative processes among multiple states, and/or that would need a strong federal presence in program design and operations (Kenesson, 2000).

Another proposed alternative to farmworker access issues includes the purchase of commercial indemnity insurance. In this scenario, states enrolling eligible migrant farmworkers or their dependants into Medicaid would pay a premium to a commercial insurance company, which would issue an enrollment card and pay all claims regardless of the patient's state of origin or the service delivery location. States already have the authority to do this when it is proven to be cost effective.

Whether through purchase of commercial indemnity insurance or a multi-state network model, public/private partnership concepts offer a promising framework for a viable approach to improving access to care and service delivery for Medicaid/SCHIP-eligible migrant farmworkers and their families. While the design challenge may be complex, the outcome could well be a workable model that is least disruptive to established state Medicaid program structures and that meets the health service needs of migrant farmworkers (Kenesson, 2000).

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Mental Health and Substance Abuse

by
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Monograph no. 4

Mental Health And Substance Abuse

BY

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Because of the difficulties inherent in a migrant farmworker lifestyle, several authors over the past two decades (e.g., De Leon Siantz, 1994; Goldfarb, 1981; Valdés, 1991) conjectured that migrant farmworkers were at risk for mental health problems. However, researchers have only recently begun to assess the mental health status of migrant farmworkers in the United States.

Research on the mental health of migrant farmworkers is still infrequent, but the picture that is slowly emerging reveals a population at risk for the development of psychiatric difficulties. The following is the current state of knowledge of the mental health of migrant farmworkers in the U.S.

Stressors Associated with the Migrant Farmworker Lifestyle

Using a semistructured interview format, researchers (Hovey and Magaña, in press c; Magaña and Hovey, 2000) recently documented a set of stressors that are commonly experienced by Mexican migrant farmworkers in Michigan and Ohio. Included were the following:

· Language barriers.
· The unpredictable nature of finding work or housing, and the feeling of instability due to constant uprooting.
· Being away from family and friends and the consequent reduction of emotional support.
· Difficult physical labor and the health consequences related to farmwork.
· Difficulties stemming from the structure of the work environment (e.g., long hours; no days off).
· Difficulties related to migrating to the U.S. (e.g., dangerous situations such as swimming across polluted waters or walking extremely long distances in the desert).
· Worries about the socialization of their children (e.g., children encountering different moral values in the mainstream society; deterioration of family values).
· Lack of daycare and supervision of children.
· Concerns over the education of children.
· Poverty and the lack of necessary resources such as food and clothing.
· Poor housing conditions (e.g., overcrowded conditions; presence of vermin; leaky roofs; lack of running water; toilet and shower facilities which were frequently broken and infected with bacteria; no laundry facilities).
· Geographical and social isolation, making it difficult to meet people and to find a place to shop.
· Emotional isolation, characterized by an emotional (rather than a physical) inability to confide in others, and keeping feelings inside rather than sharing them.
· Unreliable transportation.
· Experiences of discrimination.
· Exploitation by employers (e.g., lower wages than what was agreed; not being paid on time; excessive prices for food and housing supplies).
· Fear of violence in the community (e.g., domestic violence; violence due to drugs and alcohol).
· Health-related concerns such as poor health, limited access to medical care, and the migrant community's lack of knowledge regarding sexually transmitted diseases, HIV, and AIDS.
· Acculturating to a new environment (e.g., lack of familiar foods and of Spanish media).

The above research is relevant for at least two reasons. First, it provides a comprehensive summary that ties together the disparate stressors that other researchers have found among Mexican migrant farmworkers in south Georgia (Perilla et al., 1998), North Carolina (Clifford, 1999), Oregon (Wiggins and Castañares,

1995), California (Mines et al., 2001) and Puerto Rican and African American migrant farmworkers in upstate New York (Harper et al., 1979). More importantly, it details the circumstances which may make migrant farmworkers susceptible to mental health problems such as depression, anxiety, substance abuse, and suicide.

Depression

Prevalence

Relatively little is known about the prevalence of depression among migrant farmworkers. The three studies mentioned below measured depression through the use of the Center for Epidemiologic Studies Depression Scale (CES-D). Typically, approximately 18% of individuals who complete the CES-D will reach caseness. Reaching caseness indicates that the individual is at significant risk for depression.

De Leon Siantz (1990a) measured the prevalence of depression among Mexican migrant mothers in Texas. She found that 41% of the mothers reached caseness. Hovey and Magaña (2000) reported that 38% of their sample of Mexican migrants in Michigan and Ohio reached caseness. Contrary to these high depression levels, Alderete et al. (1999) reported that 20% of Mexican migrant farmworkers in Fresno County, California reached caseness.

Predictors of Depression

Because Mexican culture traditionally emphasizes familism, collectivist values, and affiliation, Mexican migrants may be particularly vulnerable to depression when they lack support from family and friends. In fact, the standard level of depression found in Alderete et al.'s (1999) sample may be partially due to the migrants' overall access to the available support network in the Fresno area. Not surprisingly, therefore, Alderete et al. found that those migrant farmworkers who indicated high levels of instrumental and emotional support reported lower depression. Hovey and Magaña (2000) and De Leon Siantz (1990a) reported a similar relationship between positive emotional support and lower depression among Mexican migrants in Michigan, Ohio, and Texas.

Furthermore, researchers have documented that high levels of depression among migrant farmworkers are associated with high acculturative stress (Hovey and Magaña, 2000), low self-esteem (Hovey and Magaña, 2000), discrimination (Alderete et al., 1999; Hovey and Magaña, 2000), low religiosity (Hovey and Magaña, 2000), lower income (White-Means, 1991), physical health problems (Vega et al., 1985), and lack of child care (De Leon Siantz, 1990a).

In addition, among first-generation migrant farmworkers in Michigan and Ohio, Hovey and Magaña (2000) found that individuals who willingly immigrated to the United States and who agreed with the decision to work as a farmworker were less depressed than those farmworkers who did not. This indicates that the lack of empowerment to control their lives is an important indicator of depression among migrant farmworkers.

Finally, Hovey and Magaña (2000) found that high levels of education were associated with depression. This finding suggests that, in contrast to farmworkers who compare their current situation to a lower socioeconomic experience in Mexico, farmworkers with greater education may be more sensitive to the discrepancy between their current life conditions and those of others in the U.S. These individuals may also have set life goals other than migrant farmwork and may feel that they have failed to reach them.

Anxiety

In comparison to the above literature on depression, there is even less research on anxiety. Moreover, because of the different methods that researchers have used to assess anxiety among migrant farmworkers, it is difficult to compare these findings.

Alderete et al. (2000) assessed the lifetime prevalence of anxiety disorders among Mexican and Indian migrant farmworkers in Fresno County, California. They found that 15.1% of men and 12.9% of women had experienced an anxiety disorder at some point in their lives.

Hovey and Magaña (in press a, in press b, 2001) assessed the prevalence levels of symptoms related to anxiety disorders among Mexican migrant farmworkers in Michigan and Ohio. They measured anxiety through the use of the Personality Assessment Inventory (PAI), which, in addition to overall anxiety,

measures the cognitive, affective, and physiological expressions of anxiety. Cognitive anxiety represents the expectations of harm and worry that may compromise an individual's ability to concentrate; affective anxiety reflects feelings of apprehension, tension, panic, and difficulty in relaxing; and physiological anxiety represents physical signs of anxiety. Typically, about 16% of individuals will reach caseness for each type of anxiety. Hovey and Magaña (in press a) found that 29.5% of migrants reached caseness for overall anxiety, 25.3% for cognitive anxiety, 31.6% for affective anxiety, and 27.4% for physiological anxiety. Their overall findings suggest that migrant farmworkers may be at risk for developing anxiety-related disorders.

Interestingly, Hovey and Magaña (in press a) found that first-generation migrant farmworkers reported significantly less cognitive anxiety (18.5%) than did nonimmigrant migrants (40%). Similar to the positive relationship between education and depression, this finding may be connected to the question of comparison. Immigrant workers may compare their current life situations to a lower socioeconomic experience in Mexico, whereas second and greater generation workers—who tend to be more educated—may be more sensitive to the discrepancy between their current life conditions and those of others in the U.S. Nonimmigrants may therefore experience greater worry about the future.

Migrant women may be at relatively greater risk for anxiety than are men. In addition to working all day in the fields, women usually bear the full responsibility for domestic labor (Alaniz, 1994; Hovey and Magaña, in press c). They prepare and cook meals, and are responsible for childcare and household duties such as cleaning the home and doing the laundry. Moreover, migrant women often experience sexual harassment and seldom receive maternity leave or prenatal care (Alaniz, 1994). Despite the apparent at-risk nature of the female migrant lifestyle, research has yet to fully document gender differences in anxiety among migrant farmworkers. Hovey and Magaña (2001) found that women reported significantly greater anxiety than men.

Some of the other risk factors for anxiety among migrants are also similar to those for depression. For example, in Hovey and Magaña (in press a, in press b), high anxiety was associated with ineffective social support, high acculturative stress, low self-esteem, low religiosity, and higher education. Furthermore, migrant farmworkers with greater anxiety reported that they were working in farmwork because of someone else's wishes, not their own.

It is important to note that elevated levels of anxiety may have serious implications for the physical health of migrant farmworkers. High physiological anxiety may lead to a more dangerous work situation. Moreover, chronic anxiety may lead to negative health consequences such as the suppression of immune system functioning (increasing the chance for infectious diseases), and increased risks for high blood pressure and heart disease (Comer, 2001).

Substance Abuse

As suggested by several authors (e.g., Alaniz, 1994; Inciardi et al., 1999; Perilla et al., 1998; Watson et al., 1985), migrant farmworkers may use alcohol and other drugs as coping mechanisms. In other words, they may use alcohol and other drugs to offset the stressors of migrant life, boredom, and feelings of depression and anxiety.

Prevalence

A handful of studies have explored the frequency and quantity of alcohol use among migrant farmworkers. Watson et al. (1985) found that African American migrant men in western New York drank frequently and in large quantities. Twenty-four percent of the men drank daily, another 33% drank two to three times per week, and 38% consumed five or more drinks at each sitting. Chi and McClain (1992) also found elevated levels of alcohol use among migrant men in New York. Twenty-five percent of the men consumed more than six drinks per sitting. Recently, a study by Mines et al. (2001) of 467 farmworkers originating from the Mexican state of Zacatecas revealed that two-thirds of subjects drink, 75% of men and 11% of women. Among those who reported drinking, the median is 2 days a week, 3 drinks per sitting. Approximately 13% drink 6 or 7 days a week and average 21 drinks weekly.

In terms of alcohol level among migrant men in north-

ern California, Alaniz (1994) reported an average of 10 drinks per episode on the weekends. The range was 6 to 24 drinks per worker. Finally, Alderete et al. (2000) found that alcohol abuse—with a prevalence of 12.2%— was the most common psychiatric disorder among Mexican migrant men in Fresno County, California. This level appears elevated. The substance abuse prevalence for adults in the U.S. is 7%. (Comer, 2001).

Predictors and Negative Consequences of Substance Abuse

Alderete et al. (2000) found that the rates of alcohol abuse for migrant men in California were 12 times higher than they were for women. Migrant farmworkers who were over the age of 25, who had more than six years of education, and whose main country of residence was the U.S. were also at greater risk for alcohol abuse. Watson et al. (1985) and Chi and McClain (1992) found that social isolation was the primary risk factor for elevated alcohol consumption among African American migrant men in New York.

Alcohol and drug abuse among migrants create safety hazards. These include working and driving while under the influence (Alaniz, 1994), fighting among men (Alaniz, 1994; Clifford, 1999), and an increased chance for domestic violence (Van Hightower et al., 2000). Finally, numerous negative health consequences of alcohol abuse are well documented (Comer, 2001). Chronic alcohol abuse may lead to nutritional deficiencies; the erosion of the esophagus and stomach lining; a weakened heart muscle and reduced blood flow; high blood pressure; an increased risk for cancer of the larynx, esophagus, liver, and colon; memory impairment; delirium; and cirrhosis of the liver.

Suicide Risk

Research that assesses suicide risk among migrant farmworkers is almost completely absent from the literature. The California Agricultural Worker Health Survey found that 2% out of 968 respondents experienced thoughts of suicide in the last 12 months prior to the interview. These figures demonstrate the likelihood of underreporting, as 45.8% of these subjects refused to answer the question. Of the 16 individuals with a history of suicidal thoughts, only one sought treatment at a local clinic (Villarejo et al., 2000). Using a combination of interview and questionnaire data, Hovey and Magaña (in press c) examined the prevalence and predictors of suicidal ideation among 20 Mexican migrant mothers in Michigan and Ohio. They found that 35% of the women reported a history of suicidal thoughts. In comparison to the women without a history of suicidal thoughts, they reported the following risk factors: lower self-esteem, a more dysfunctional family environment, less effective social support, more hopelessness about the future, greater acculturative stress, and more depression.

Although this research is of a preliminary nature, it begins to identify factors that may make migrant farmworker mothers susceptible to suicidal ideation. In fact, using the above six factors, Hovey and Magaña were able to predict, with 100% accuracy, which migrant women had experienced suicidal ideation and which had not.

Mental Health of Children

The psychological pressures of growing up in the world of migrant farmwork are trying at best, and debilitating at worst. Difficulties include, but are not limited to, poverty, hunger, unsanitary living conditions, and poor health; working in the fields from a young age; the constant mobility and consequent breaking of ties with family and friends; the lack of English proficiency (Wright, 1991); leaving the school year early, entering school late, being older than other students in the same grade level (Wright, 1991), and eventually dropping out from school altogether (Cranston-Gingras and Anderson, 1990; Henning-Stout, 1996); having a depressed and thus emotionally unavailable mother (De Leon Siantz, 1990b); and frequently being ostracized by parents and peers as undesirable playmates (Kupersmidt and Martin, 1997).

Anxiety, Depression, and Disruptive Behaviors

Kupersmidt and Martin (1997) assessed the prevalence of psychiatric disorders in children (aged 8 through 11 years) of Mexican and African-American migrant workers in North Carolina. The elevated levels of pathology found are striking. Fifty-nine percent of the children revealed one or more psychiatric disorders. The most common disorders (experienced by 50% of the children) were anxiety related. These included

phobias, separation anxiety, overanxiety, and avoidance. Seventeen percent of the children displayed disruptive behaviors and 8% were depressed. Kupersmidt and Martin believed that the elevated anxiety constituted a normal response to psychological pressures such as those outlined in the previous paragraph.

Child Maltreatment

For the purposes of this discussion, maltreatment is defined as involving one or more of the following: physical abuse; sexual abuse; or emotional abuse (verbal or emotional assault sufficiently serious and consistent to affect the emotional development of the child); physical neglect (reckless disregard of child's health and safety); educational neglect; emotional neglect (knowingly permitting maladaptive behavior such as drug abuse by the child).

Using state data sources, Larson et al. (1990) assessed the incidence of maltreatment of migrant children in New York, New Jersey, Pennsylvania, Florida, and Texas. They found that migrant children were significantly more likely to be maltreated than other children. The overall rate of maltreatment was 27.7 incidents per 1,000 children. This is approximately three times the rate of maltreatment found in the general population of these five states.

This high incidence of maltreatment is likely a function of multiple factors (Alvarez et al., 1988; Larson et al., 1987, 1990). For example, economic frustration and distress may lead to a greater potential for family conflict, thus increasing the migrant child's vulnerability to maltreatment. Social and physical isolation—the result of a migratory lifestyle—also place the child at a higher risk because it reduces the emotional support and assistance which can help alleviate family stressors. Poverty often leads to poor prenatal care. This, in turn, is frequently associated with low birth weight and perinatal complications, which are characteristics often observed in families with a history of maltreatment. Finally, because many migrant parents have been maltreated as children, they may be more predisposed to using parenting styles that result in aggression.

Conclusions and Recommendations

Research

Although scant research has addressed the mental health of migrant farmworkers in the United States, what we do know points to a population at risk. High levels of pathology have been found for depression, anxiety, alcohol abuse, and violence toward women and children. In addition, preliminary data suggest that some migrant farmworkers may be at risk for suicide. In order to arrive at more precise prevalence estimates, we need to further explore the rates of these and other disorders with large-scale studies of a representative design. Implicit in this recommendation is that future research should be comprehensive and should thus explore the health of migrant farmworkers in all areas of the country. Only then will we have a clear picture of the at-risk nature of the migrant lifestyle. Longitudinal research can track the fluctuations in mental health status, and can, for example, determine whether individuals are at greater risk during the migratory agricultural season in comparison to the "off-season." Finally, future research should attempt to isolate risk and protective factors. This will help detail the possible points for service intervention.

Service

As implied above, our current state of knowledge suggests the need for prevention, assessment, and treatment services for migrant farmworkers who may be at elevated risk for domestic violence and for the development of psychiatric problems. It is thus imperative that additional mental health programs for migrant workers are funded and developed. The following are recommendations for service.

Services for migrant workers should be physically, linguistically, and culturally accessible. Because migrant workers may be unaware of existing services, efforts should be made to inform them of their availability. Moreover, due to the migratory nature of their lifestyle, services that are provided to migrant workers need to be immediate, and the provider should be aware of services that are available in their other areas of residence. Service providers should also be linguistically and culturally capable in their communication with migrant farmworkers. Ideally, the provider

should not only speak Spanish and English (when working with Latin clients), but should understand the nuances of migrant culture. Another option is to have professional translators available, although this alternative should be utilized only if necessary.

Due to their demanding work schedule, prevention efforts should be targeted to times and places that are convenient to migrant farmworkers (e.g., at the labor camps on evenings or weekends; outreach efforts in Texas or Florida during the off-season).

Possible preventive strategies include the distribution of information about mental disorders and their associated risk factors. Possible avenues of distribution include the inclusion of educational articles in migrant newsletters and the distribution of mental health literature at migrant health fairs.

Other strategies include the establishment of support groups—at camps or local community centers—where migrant workers can discuss their difficult experiences and the ways in which they can cope with distress. Support groups would increase farmworkers' self-esteem and would reduce their isolation by providing emotional support. Educational presentations—conducted by health professionals—can also be offered. These presentations can address specific topics such as risk factors for anxiety and depression, substance abuse, and learning to cope with migratory stressors. English classes can be held onsite to offset the inherent difficulties of not knowing English. Finally, mental health services can be integrated into mobile health clinic programs. Mobile clinics have been found to be effective in providing health care to rural, underserved populations (Lee and O'Neal, 1994; Wilson et al., 1995).

The church is another possible prevention resource (Hovey, 1999). Religious organizations help foster social networks and therefore reduce psychiatric risk through social support. Church attendance may also provide exposure to basic religious beliefs thought to increase coping. Church members may use their priests and ministers as sources for emotional support. In addition to providing direct support, the clergy may disseminate information to farmworkers about the availability of other community resources. The cultural importance of the church extends beyond scheduled religious services. Therefore, outreach programs sponsored by the church, but not necessarily held at the church, will likely have the respect of farmworkers.

Lastly, prevention efforts can be incorporated into Camp Health Aide or *Promotora* programs (Booker et al., 1997). These programs train migrant farmworkers to provide health information and support to the migrant farmworker community. The Camp Health Aides are trusted members of the community. They organize and facilitate educational sessions and act as liaisons between community health agencies and migrant workers. In addition to providing education, these programs provide social contacts and increase self-esteem among the Camp Health Aides and participants.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Outreach Services
by
Tina Castañares, M.D.
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Hood River, Oregon

Monograph no. 5

Outreach Services

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Over 100 migrant health centers, along with a dozen migrant "voucher" and other special programs, are subsidized by federal funds designated to provide services to the migrant and seasonal farmworker (MSFW) community. Many of the over 800 federally qualified community health centers and rural health clinics also serve MSFWs without receiving specific migrant health funding. Since 1999 the federal Migrant Health Program has been able to boost its grant support to those migrant health centers which meet certain standards and to substantially increase funding of outreach programs. All of these efforts are salutary and, over time, should result in significant differences in MSFWs' access to primary medical and dental care and necessary ancillary services, along with improvements in health status and reduced disparities.

However, it is sobering to note that according to the most recent estimates (1990 and 1996), federally assisted migrant health services reach only about 15-20% of the nation's MSFW population (Duggar, 1990; National Migrant Resource Program [NMRP], 1996). Indeed, changing demographics in the 1990s suggest that it may be more challenging now than at any time since the inception of the Migrant Health Program to reach and effectively serve farmworkers and their families. For example, over one in three of U.S. farmworkers today are newcomers to the U.S. and a third of those are new to agricultural labor — an enormous change over less than a generation, reflecting the rapid domination of new immigrants in this workforce. The vast majority of them are monolingual in Spanish and have a median educational level of 6th grade (20% with fewer than three years of schooling). Estimated literacy is such that 85% would have difficulty obtaining information from printed materials in any language. A growing percentage of MSFWs are ineligible for public insurance, in part due to federal laws enacted in the mid-1990s (Department of Labor, 2000). Farmworkers are migrating to new areas (Home, 2000), including many communities which lack the infrastructure to provide them with appropriate health care. Finally, the undocumented immigration status of over half of today's U.S. farmworkers is likely to correlate with underutilization of medical services (Schur, et al., 1999). Federal investments need to increase and to support outreach efforts intensively. Many health disparities have been observed between MSFWs and other populations, including infant mortality, life expectancy, incidence of malnutrition and rates of parasitic infection, dental disease and tuberculosis (NMRP, 1996). Serious environmental risks for farmworkers involve pesticide exposures and other occupational injuries. As summarized by the *Migrant and Seasonal Farmworker Health Objectives for the Year 2000*, "a firm linkage to mainstream health care and human services must be delivered with a broad awareness of the unique health needs. MSFWs require effective, migrant-specific, culturally tailored health care. In appropriate languages, basic principles of prevention must be taught in lifestyle-sensitive ways. Lay advisors, crew leaders and growers must all participate in the promotion of workplace health and safety" (NMRP, 1996).

Community outreach programs have long been the linchpin in meeting these tremendous challenges to design and provide health care appropriate for the physical, cultural, and linguistic characteristics of MSFWs' lives (Arizona Department of Health Services, n.d.). The federal Migrant Health Program defines community outreach as "community-based activities with migrant and seasonal farmworkers and their fam-

ily members which improve both their utilization of health services and the effectiveness of those health services. Community Outreach acts to increase the accessibility, acceptability, and appropriateness of available health services" (HRSA, 1992). Outreach is clearly the key to surmounting these and other frequent obstacles faced by MSFWs:

· *Poverty and lack of insurance*: Outreach programs effectively convey access and eligibility information — even enrollment in public programs and vouchers for direct services (Slesinger & Ostead, 1996) — to workers in the field.
· *Distance from care and lack of transportation*: Outreach programs — offering vans, drivers, volunteer coordination, and vouchers for public transport — facilitate physical access to care.
· *Lack of knowledge about available services*: Outreach programs bridge the gap by carrying out community-based campaigns, making use of new and old technologies and media.
· *Lack of understanding of health problems and risks*: Outreach programs provide culturally competent, peer-based education by lay health promoters (*promotores)* and other community health workers, offering trainings and presentations, screenings, home visits, and other innovative services in the field.
· *Lack of understanding of the U.S. health care system:* Outreach programs oftentimes function as "traffic controllers" in local communities by providing information to farmworkers about services not only at migrant/community health centers (M/CHCs), but also at other health delivery sites (hospital emergency rooms, health departments, etc.). This simple informational step can assist with a more optimal flow of patients to M/CHC's and share the costs of providing health care among all community stakeholders.
· *Cultural and linguistic differences with providers of care*: Outreach programs utilize peer-based staff and volunteers who interpret, translate and advocate for patients, provide popular education, educate professionals in cultural competency, and even do targeted case coordination.
· *Fear or mistrust of the health care establishment or governmental* assistance: Outreach programs, through the credibility of peer-based staffing, convey accurate information and dispel rumors in their communities.

The past ten years have witnessed the growth and success of the lay promoter (*promotora)* model in migrant health. From early beginnings in North Carolina (The Maternal and Child Health Migrant Project), Arizona (*El Comienzo Sano*), and elsewhere (Watkins and Larson, 1991; Annie E. Casey Foundation [AECF], 1998), through the development of the Midwest Migrant Health Information Office (now Migrant Health Promotion) and its Camp Health Aide program in Michigan and Texas, to numerous new projects throughout the nation, the *promotora* model has become an effective movement. Outcome studies from these projects, such as one showing dramatic improvements in diabetes self-management in patients through Oregon's *Cuidando Nuestra Salud* lay health promoter program (La Clínica del Cariño, 2000), are important indicators of the effectiveness of this approach in improving access, reducing disparities, and enhancing quality of life issues for MSFWs.

Unfortunately, during the same decade that has seen these innovations and early successes, other changes in the U.S. health care system have created financial pressures on health centers to reduce or drop non-reimbursable services, including outreach. In migrant health, such a response is untenable. Outreach is an essential element of the delivery system to a changing and increasingly needy population. It requires reliable funding and logistical support.

While M/CHCs, by and large, are the leading providers of quality, affordable, and comprehensive primary health care for farmworker families in the United States, additional leadership and support is needed to assist them. Innovative strategies and resources are required to provide a larger degree of consistency and standardization among the network of health centers nationwide, while finding an appropriate balance to customize these strategies for individual local communities.

Migrant health grantees must be held to the expectation of providing substantive outreach services to farmworkers, and they must have ongoing opportunities to receive stable funding for these activities. Cultural and linguistic competence are widely recognized as being crucial to the delivery of effective health care in general. Outreach in particular requires such competence in order to surmount the hurdles and obstacles described. All federally subsi-

dized outreach programs for MSFWs must address current realities of the farmworkers in their service areas, including language, literacy, countries and cultures of origin, demographic trends, and health risks.

The cultural competency and effectiveness of lay health outreach models targeted to the MSFW population have been amply demonstrated (Sherer, 1994; Larson, 1991; AECF, 1998; Músquiz and Wiggins, 1992; Harrison Institute for Public Law [HIPL], 1997; González, 2000; Cárdenas and Davis, 2000; Bender and Pitkin, 1987). The Harrison Institute for Public Law pointed out to prospective funders in 1997 that "projected medical cost savings of timely outreach can finance community health worker program costs," (HIPL, 1997) and also emphasized that funding must be sufficient "for projects to have a chance to fully operationalize, as well as to collect and analyze meaningful data" (HIPL, 1997).

In migrant health, the challenge of making real breakthroughs during the coming decade in improving access and reducing health disparities for MSFWs depends on investing adequately in lay health outreach. Several local communities have developed other health outreach models that are proving to be effective in the delivery of care to farmworker families. Additional support to evaluate and expand these health outreach models is necessary.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Domestic Violence Series

by

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Monograph no. 6

DOMESTIC VIOLENCE SERIES

BY

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In recent years, domestic violence among migrant farmworker women has begun to receive national attention. From national not-for-profit agencies such as the Family Violence Prevention Fund and NOW's Legal Defense and Education Fund to federal agencies such as the Violence Against Women Office, battered migrant farmworker women's voices are finally being heard. Examples include farmworker womens' representation on national-level committees, such as the National Network on Battered Immigrant Women, and presentations at national and international conferences, including the Fourth International Women's Conference in Beijing, China.

Despite these advances, research on domestic violence among this population continues to progress at a slow pace, and much is still unknown. While our understanding of domestic violence in the general population grew considerably during the 1970's and 1980's, it was not until the mid-1990's that migrant and seasonal farmworker (MSFW) women were included as subjects of, and participants in, research in this area. Until then, "mainstream" domestic violence programs and researchers were unfamiliar with migrant farmworker women and the unique challenges of their lives.

Within the small body of research that does exist today, most studies have focused on documenting the problems facing these women. In general, prevalence studies (e.g., Rodriguez, 1998), using non-random samples of MSFW women, have reported that 20% of women experienced physical abuse and 10% reported forced sexual activity in one year.

The California Agricultural Worker Health Survey found that overall, 5% of female farmworkers had been the victims of violence in the previous twelve months of the survey. In one particular site, 14% of women reported being physically abused in the previous year. The high variability demonstrated across sites is a likely indication of underreporting.

More recently, Van Hightower, Gorton, and DeMoss (2000) examined the prevalence and predictors of domestic violence in a large nationwide sample of migrant farmworker women. They found that 19% of the women reported being physically abused in the past year. Within these 19%, one-fourth of the women reported also being sexually abused. In terms of predictors, they found that migrant farmworker women were 47% more likely to be abused than seasonal farmworker women; that women whose partners used drugs and/or alcohol were six times more likely to be abused; and that pregnancy decreased the probability of abuse by 65%.

Contrary to this last study, Van Hightower and Gordon (1998) examined rates of domestic violence in Latina women from two rural health clinics in Texas. They found that level of abuse and migrant status were not related.

Lifetime abuse, abuse during pregnancy, risk for homicide, and health effects of sexual

abuse are only a few of the problems that have yet to be investigated with this group of women. Large, population-based studies are needed to continue to document the prevalence and associated consequences of domestic violence for this population.

Other research in the area has included the evaluation of the development *Lideres Campesinas*, a grassroots model created to provide outreach and education to farmworker women in California. The project was developed in 1995 and continues today. From 1995-1998, this research was funded by the Centers for Disease Control, the Office of Migrant Health, and the Migrant Clinicians Network (Rodriguez, 1999). Current research includes a project funded by the National Institute of Justice to evaluate the impact of two community-based models (in California and Wisconsin) for outreach and education with MSFW and their access to the criminal justice system (Rodriguez, research in progress).

It is reported worldwide that one in three women have experienced some form of abuse by an intimate partner or family member at some point in their lives (Population Reports, 1999). In addition, a recent study of women in the U.S. by the Commonwealth Fund indicated that 31% of women reported being kicked, hit, punched, choked, or otherwise physically abused by an intimate partner during their lifetime. More than 3 million women (3%) reported experiencing domestic violence within the past year (Commonwealth Fund, 1998). Although Latina battered women have been the focus of research on topics such as battering during pregnancy (Campbell et al., 1999; McFarlane, Wiist, & Watson, 1998; McFarlane et al., 1999), sexual abuse (El-Bassel, et al., 1998; Lira, etal., 1999; Davila and Brackley, 1999), and barriers to use of services (Bauer, et al., 2000; West, et al., 1998), migrant farmworker women have not been identified in the samples of these studies.

In addition to the acute effects of injury on battered migrant farmworker women there are other health consequences that must be considered. These include: arthritis, chronic neck or back pain, migraine and other frequent headaches, stammering, problems seeing, STDs, chronic pelvic pain, stomach ulcers, spastic colon, frequent indigestion, diarrhea, or constipation (Coker, et al., 2000). Furthermore, the mental health consequences of domestic violence cannot be overlooked. Studies have shown that 29% of women who were battered attempted suicide, 37% had symptoms of depression, 46% had symptoms of anxiety disorder, and 45% experienced post-traumatic stress disorder (Danielson, et al., 1998; Stark & Flitcraft, 1995; Housekamp and Foy, 1991; Gelles and Harrop, 1989). Therefore, it is important to note that since these studies have not specifically identified or included migrant farmworker women, the specific health effects of domestic violence on MSFW women are unknown.

Unfortunately, health care providers have often been slow to respond to the needs of battered women in their practice. Research has shown that attitudes of health care providers around the issue of screening for Intimate Partner Violence have revealed stereotypes, myths, and fears about the need for screening with all of their female patients (Sugg and Inui, 1992; Population Reports, 1999). Currently, work is being conducted by the Migrant Clinicians Network to train migrant health care providers in screening and assessing battered MSFW women.

Recommendations in the area of policy to promote positive change in this area include the establishment of protocols at a national level to address the need for screening, assessment, and referral of battered migrant farmworker women. Domestic violence should be identified as a public health problem with serious physical, emotional, and psychological consequences that are caused by the violence, and should not be melded into the general category of mental health as it is currently defined

within the Office of Migrant Health. Practice-based recommendations include training for migrant health providers on the identification, assessment, and care of battered migrant farmworker women. Migrant health providers should also be encouraged and trained to include domestic violence assessments of all female patients in their practice.

Funding for more research in domestic violence should be provided at adequate levels to conduct population-based studies that can identify the health consequences of domestic violence, as well as identify the current prevalence of domestic violence among MSFW women in this country. Research should also be conducted to identify access to services, the perceived needs of battered women, and the specific areas of risk for battered MSFW women, including but not limited to the risk for homicide.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Disaster Relief

by

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Monograph no. 7

DISASTER RELIEF

BY

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Migrant and community health centers (M/CHCs) are faced with great challenges in serving the farmworker population. They serve approximately 15% to 20% of the estimated 3,000,000 to 5,000,000 farworkers nationwide. When faced with a natural disaster, these entities find themselves restricted by emergency relief vehicles that are financially limited and unable to respond to the needs of the areas that they serve. One of the criticisms of the emergency relief vehicles is that funding available on the Federal level is not appropriated to specific states. In addition, there is a cap to monies available to states under one major emergency relief program. In order to improve disaster relief in remote areas with limited resources, it is imperative that health centers become actively engaged in advocacy to secure a portion of the state allocation to assist with the additional costs, keeping in mind that, if successful, funding will be secured most likely a year or more after the initial disaster.

Although not well documented in the literature, there is anecdotal information indicating that several states that have experienced disasters have negotiated support for increased costs in health care delivery. These include Dade County, Florida after Hurricane Andrew; North Carolina in the aftermath of Hurricane Floyd; and California after the freeze of 1998. The California freeze experience is the most recent and includes the most far-reaching beneficial impact. This experience illustrates how health centers experienced extraordinary costs and some increased those extraordinary costs, through their participation in relief efforts. For the future, it is critical that the disaster itself be thoroughly documented, as well as any efforts and successes in bringing relief resources to bear on the health care system. Only through thorough documentation of the impact of such natural disasters on the farmworker population can we present the case for the need, and begin to effect relief on a more regular basis.

California Example

Mid-December 1998 brought the coldest temperatures to California in almost a decade. These temperatures were cold enough to devastate California's agricultural industry in eight counties. Emergency relief was immediately available for some sectors of California's agricultural areas. However, migrant health centers were not among those fortunate enough to have their losses addressed expeditiously. In July 2000, these centers finally received compensation for the losses incurred because of their emergency relief efforts.

Suspending the sliding fee scale resulting in 15,000 uncompensated encounters. Coordinating emergency food and clothing services and augmenting services supported by the Woman, Infants, and Children (WIC) program were just a few of the emergency relief efforts spearheaded by California's migrant health centers. Clinics chose to participate in disaster relief efforts because of their commitment to the health and well-being of the migrant and seasonal farmworker population. The provision of this care constituted extraordinary expenses, amounting to over $3 million (California Department of Health Services, personal Communication, March 7, 2000). Health centers that were able to bear the extraordinary costs implemented relief efforts.

After tremendous advocacy on the part of migrant health centers in freeze-impacted areas, California's Department of Health Services, the California Primary

Care Association and others, the California Office of Emergency Services distributed $1 million in Federal Emergency Management Agency relief funds to impacted migrant health centers (California Department of Health Services, personal communication, March 7, 2000). Migrant health centers received notice of the availability of funds in February of 2000, more than a year after the Freeze of December 1998.

This background document is intended to assist health centers that experience similar emergencies in seeking emergency relief for themselves and their low-income patients. Recommendations on changes that would assist health centers in securing this funding will also be provided.

Background

Mid-December 1998 brought five nights of freezing temperatures to California's Central Valley, the coldest temperatures since 1990. These temperatures devastated the Central Valley's citrus belt causing damage to the local economy in the amount of $370 million – in crop losses alone (Visalia Times Delta, 1998). However, the greatest victims of the freeze were those who have the least, the migrant and seasonal farmworker population and other working poor that depend on the citrus harvest for their livelihood. These vulnerable populations lost an estimated $42 million in lost wages for 5 ½ months of unemployment (Visalia Times Delta, 1999). The loss of employment created a dangerous public health situation. Disasters like the Central Valley freeze threaten the health of the most medically vulnerable populations, such as the migrant and seasonal worker population and their dependents.

Estimates indicate that 14,000 migrant and seasonal workers lost their employment due to the freeze (Visalia Times Delta, 1998). The last freeze in 1990 resulted in 15,000 workers losing their jobs (The Portville Recorder, 1998). The loss of these jobs impacted an estimated 60,000 people in all, most of whom were children of migrant and seasonal workers (The Portville Recorder, 1998). The loss of a source of income for a population that already survives below the poverty line means that they must focus on ensuring the bare necessities for their families. In this context, accessing health care services – even on a sliding fee scale – may be out of reach for most disaster victims.

Farmworkers are already more susceptible to preventable illnesses than the average population. Farmworkers often live in substandard housing with poor water quality and are often exposed to dangerous chemicals in their homes and their work site. The farmworker population's quality of life results in a high incidence of urinary tract infections, lead poisoning, and other preventable diseases (National Center for Farmworker Health, Inc.). According to the National Center on Farmworker Health, the migrant farmworker population suffers as much as twenty times the rate of diarrhea among the urban poor, and up to 78 percent of all farmworkers suffer from parasitic infection, compared to two or three percent of the general population. To a large extent, the freeze made this susceptible population lose their economic ability to access care.

Emergency Relief for Farmworkers

The Food, Agriculture, Conservation, and Trade Act of 1990 (42 U.S.C. 5177a)

In 1990, after a series of natural disasters in agricultural sectors, including California's 1990 freeze, the Food, Agriculture, Conservation, and Trade Act of 1990 (the Act) was passed. The Act allocated funding to the United States Department of Agriculture (USDA) for distribution to tax-exempt public agencies or private organizations that have experience in providing emergency services to low-income migrant and seasonal farmworkers.

In 1999, after California's freeze and another agricultural disaster in Florida, $20 million was appropriated to the USDA under the Act. Again the emergency funds were to assist low-income migrant and seasonal farmworkers under section 2281 of the Act. The Request for Proposals for Grants for Emergency Assistance to Low Income Migrant and Seasonal Farmworkers, which appeared in the Federal Register August 2, 1999, reiterated the intent of the funds. Public agencies or private nonprofit organizations with farmworker emergency relief experience were invited to apply for funds. The funds were to provide services to farmworkers, including assistance in meeting rent or mortgage payments, utility bills, child care,

transportation, school supplies, food, repair or rehabilitation of farmworker housing, and other services.

The majority of California's funding went to the United Farm Workers (UFW) to provide job training services. One health center was able to secure USDA emergency relief funding. That health center was in the highest freeze-impacted area and had strong impact documentation. For California migrant health centers, securing USDA emergency relief was difficult for many reasons. The presence of a historically powerful farmworker organization made efforts to focus relief funding on health a challenge. In addition, the types of relief services listed in the Act do not specifically include health. This oversight in the legislation makes securing health care funds more difficult. However, one migrant health center was able to secure funding through this vehicle.

The Food, Agriculture, Conservation, and Trade Act of 1990 provides a logical vehicle for migrant health centers to receive emergency relief. The addition of health care services to the language of this Act would facilitate the ability of health centers to access these resources.

Federal Emergency Management Agency and other efforts to Secure Emergency Relief Funding (FEMA)

In 1998-99, California's migrant health centers spearheaded a multitude of efforts to secure funding for losses suffered because of the freeze. We attempted to secure funding via our State's own budgetary process, while at the same time seeking compensation for losses under both FEMA and the USDA. Emergency relief was a new arena for California Primary Care Association (CPCA) and the migrant health centers we represent. Without any experience in this area, we followed all logical steps and sought out any allies.

The Importance of Documentation

As mentioned, in 1990 California experienced a similar freeze. Because of the presence of a strong farmworker advocate in the San Francisco office of HRSA, Manuel deSantiago, a study was commissioned to look at the impact of the freeze on migrant health centers. The study documented many adverse trends experienced by migrant health centers in the 1990 freeze, such as the dramatic growth in non-farmworker patients for migrant and community health centers, as well as the transition of previously insured packinghouse farmworkers to uninsured status. The 1990 freeze resulted in a 17% increase in patients seeking health care services in migrant health centers. Many of these patients had lost their private insurance coverage, and therefore were seeking services under a sliding fee scale or self-pay system (Campos Communications, 1992).

Migrant health centers experienced a significant overall decline in collections of self-pay charges during the 1990 freeze because farmworkers lost the ability to even pay nominal sliding-fee-scale charges. The percentage of collection of self-pay charges decreased from 43% to 24% for the migrant health centers in the most affected areas. In 1990, losses were minimally estimated at $234,742 for each center studied (Campos Communications, 1992). A significant loss of revenue within a short period of time caused serious destabilization of the centers in freeze areas, jeopardizing their ability to serve all patients, including freeze victims.

The documentation of the harms to migrant health centers and the fact that California was experiencing the exact same natural disaster bolstered our advocacy on behalf of migrant health centers. In addition, this previous documentation provided us with information on how to document losses the migrant health centers were experiencing in 1998-99. HRSA again assisted in our efforts in 1998-1999 by documenting some of the costs to migrant health centers (de Santiago, 1999).

Mobilizing Allies

As mentioned above, HRSA played an important role in assisting California's migrant health centers. Other allies were just as critical, including Central Valley legislators and representatives and California's Department of Health Services (DHS). One legislator in particular, Assembly member Dean Florez, assisted our health centers throughout the entire process. He helped pressure DHS to seek the funding from FEMA and the USDA after our state-specific efforts had failed.

Conclusions

California's experience with two natural agricultural disasters has highlighted the tremendous difficulties migrant health centers face in serving an already medically vulnerable population. Currently, California's migrant and community health centers serve over 300,000 farmworkers and their dependents (OSHPD 1999). Without the additional hardships of a natural disaster, serving this population necessitates targeted outreach, enabling services such as transportation and interpretation, weekend hours, etc. The costs of serving this population are in many ways already extraordinary. Add to this situation a natural disaster, and most migrant health centers simply do not have the additional resources to adequately address these difficult circumstances.

Unfortunately, Federal assistance becomes available only if and when the President declares a disaster. Existing emergency relief vehicles are also seriously deficient at USDA because of the cap of $20 million that is imposed on farmworker disaster assistance. As California's experience illustrates, all health centers experienced extraordinary costs through their participation in relief efforts. Based on this experience, the Bureau should develop and implement an emergency relief plan for all health centers experiencing difficulties in serving victims of natural disasters.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Housing

by
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Monograph no. 8

HOUSING

BY

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Although they toil to bring a bounteous harvest to our tables, farmworkers are often faced with some of the poorest living conditions in their communities. Many farmworkers live in substandard and unsafe housing that lacks adequate sanitation and protection from the elements, and in many cases this housing is also overcrowded. Overcrowded and substandard housing can contribute to the contraction and spread of disease, as well as injury through household accidents. Children are especially vulnerable to the health and safety risks posed by poor quality and overcrowded conditions.

While there is much anecdotal information, there is little national data on the type and quality of housing occupied by farmworkers. One effort to gather this information is a national survey of farmworker housing conditions undertaken by the Housing Assistance Council (HAC), a nonprofit organization whose mission is to improve affordable housing in rural areas around the country. Offering the most recent research on farmworker housing conditions, this survey highlights some of the most pressing housing problems experienced by farmworkers (Housing Assistance Council [HAC], 2001).

Housing Conditions

Crowded housing is a persistent problem for migrant and seasonal farmworkers. A farmworker testifying before the National Advisory Council on Migrant Health said that, "People began to tell us...how much they have suffered because they are sent to one house, crowded. They have to work hard. They don't have a good mattress to sleep on, and they are mistreated" ("Testimony," 1999). Among the over 4,600 housing units surveyed by HAC around the country, 52 percent were crowded. (Federal standards classify housing as crowded if there is an average of more than one person per room, excluding kitchens and bathrooms.) Seventy-four percent of the households in crowded units had children. By contrast, the 1997 American Housing Survey found that 3 percent of all U.S. households were living in crowded conditions (see Table 5 of HAC, 2000, for complete data).

Many farmworkers crowd units to limit the cost impact of housing on their low incomes. One farmworker bluntly described how crowding is related to the need to share rent:

> "We have to put up with this because we can't afford anything else," said Maria-Guadalupe Sanchez, a farm worker who lives with 13 other people in a three-bedroom house in Watsonville, California (Greenhouse, 1998).

HAC's survey findings provide some support for the connections among between crowding, income, and housing cost. Almost 60 percent of the farmworker households surveyed had low incomes, which means they earned 80 percent or less of Area Median Income (AMI). Even modestly priced housing may be unaffordable when households make little money. HAC's survey found that 29 percent of farmworker households paid more than 30 percent of their incomes for housing, the federal standard for housing cost burden. Housing cost burden did vary in different regions of the country, with this problem most prevalent in the Western migrant stream where 43 percent of farmworkers were burdened by housing costs. Another incentive for farmworkers to crowd their housing is that many migrant farmworkers must also support a

home-based household. Sharing rent allows them to send a portion of their pay home to support their families (U.S. Department of Labor, 1994 – This report is based on data from the 1993 National Agricultural Workers Survey [NAWS]. It notes that international migrants in 1993 comprised 71 percent of all migrant farmworkers. While 64 percent of these international immigrants were married, only 16 percent traveled with their spouses.)

Not only is farmworker housing often very crowded, but in many cases these units lack adequate sanitation and working appliances. Not atypical is the following description of the kitchen and bathroom a Haitian farmworker had to share with occupants of four other dormitory-style rooms in Immokalee, Florida:

> The shower has filthy, crumbling concrete walls – the kind that won't come clean. There is a metal sink held by a rotting plywood counter, and the toilet often backs up, so the tiny room reeks of sewage. At six feet tall, Etienne nearly bumps against the sagging ceiling of the narrow community kitchen, where days before a leak had puddled more than an inch of water (Edwards, 1998).

Under these conditions, many farmworkers are unable to store food safely, prepare a warm meal, or take a shower after a hard day of work in the fields. Although most of the units surveyed by HAC in the Eastern stream had a working stove, refrigerator, bathtub and toilet, in 22 percent of the units one of these was broken.

Pesticide exposure is a health and safety issue unique to farmworkers, and the lack of laundry facilities in farmworker housing can increase the danger of pesticide poisoning. More than 26 percent of the units surveyed by HAC were directly adjacent to pesticide-treated fields. Among these units, 53 percent lacked a working bathtub/shower, a laundry machine, or both.

Missing or broken appliances are not the only substandard housing problems encountered by farmworkers, nor are substandard living conditions confined to a few locales. Housing problems can run from peeling paint to broken windows to serious structural deficiencies, and each may contribute to poor health and safety concerns. Serious structural problems such as sagging roofs, porches, or house frames were found in 22 percent of the HAC survey units. Related problems included holes in the roof, found in 15 percent of the units, and foundation damage in 10 percent of the units. Thirty-six percent of the units surveyed had broken windows or windows missing screens, exposing occupants to insects, dust, or other irritants. Almost 41 percent of the units had peeling paint on their exteriors, and 29 percent had peeling paint or broken plaster inside. Evidence of leaks was found in 29 percent of units, and exposed wiring was observed in 9 percent of the housing.

HAC developed a measure of substandard housing that characterizes units as "severely substandard" if they lack complete indoor plumbing and/or have substantial physical deficiencies, and "moderately substandard" for those units that have complete plumbing but quite a few exterior and interior problems. Among all the units HAC surveyed, 17 percent were severely substandard and 16 percent were moderately substandard. Sixty-five percent of severely substandard housing was occupied by households that included children. Substandard housing was most prevalent in the Eastern migrant stream, with 43 percent of Eastern stream units either severely or moderately substandard. Florida had the greatest prevalence of substandard housing among the states surveyed, with 31 percent of Florida farmworker housing in severely substandard condition and 26 percent in moderately substandard condition.

Overall, Florida and the Northwest region (Idaho, Oregon and Washington) had the greatest confluence of housing problems. Compared with California, the home base state of the Western stream, the Northwest region had a greater percentage of households with low incomes, cost-burdened households, substandard units, and a slightly higher rate of overcrowding. Compared with upstream areas in the Eastern migrant stream, Florida also had greater incidence of all of these problems. Generally, the prevalence of households with low incomes and housing cost-burdened was greatest in the Northwest, while substandard housing and crowding was most pronounced in Florida.

Health and Housing

Poor quality and crowded housing can contribute to a number of serious health problems. Crowded conditions are associated with increased incidence of such infectious diseases such as tuberculosis and influenza. Lack of sanitary facilities, sanitary facilities located in sleeping areas, and broken cooking appliances can contribute to the contraction of hepatitis, gastroenteritis, and other conditions. These conditions can also expose food preparation surfaces to pesticides and fertilizers (InterAmerica Research Associates, 1978). Water leakage and broken windows expose residents to irritants such as dust and mold, which can complicate respiratory problems such as asthma. Long-term exposure to such irritants can cause serious health complications among children with allergies (Sandel and Sharfstein, 1998). Rodent and insect infestations also contribute to poor health: for example, children with asthma or allergies who are exposed to cockroaches in the home miss more school, suffer more hospitalization, and have more unscheduled visits to health clinics (Sarpong, et al., 1996).

Many farmworker units are older, and although HAC's survey does not determine the age of the housing examined, the prevalence of peeling exterior and interior paint raises the possibility of lead poisoning, especially when children are present. Even low levels of lead exposure can have profound impacts, dramatically decreasing IQ and motor function. Long-term exposure can damage the blood, brain and reproductive system. Lead exposure can also impact children's education, with one study finding that children with increased lead levels were seven times more likely to drop out of high school and five times more likely to have a disability (Needleman, et al., 1990).

Some housing problems are a direct threat to safety. Most notable among these are sagging structural features, which HAC found in a significant number of units. Another physical danger is exposed wiring, which is not only a shock hazard, but also can cause fires in the home. Broken steps and holes in the floor can cause injuries, especially to children.

Federal Agencies and Farmworker Housing Development

The only federal production programs dedicated to farmworker housing are administered by the U.S. Department of Agriculture's Rural Housing Service (RHS), referred to as the Section 514 loan and Section 516 grant programs. Since 1962, these programs have supported the production of approximately 17,000 farmworker housing units. However, the funding levels do not approach the level of demand. In 1997, a survey of 30 nonprofit housing developers found they had prepared over $134 million in applications, while the combined Section 514/516 appropriations that year totaled $28 million (HAC, 1997). The U.S. Department of Labor (DOL) also supports farmworker housing development through technical assistance grants to experienced housing organizations that help local organizations build new farmworker housing. While it has no housing programs specific to farmworkers, the U.S. Department of Housing and Urban Development (HUD) has a variety of programs that farmworker housing advocates have used to build affordable housing for their clients. However, greater targeting of HUD resources to farmworker housing projects and initiatives could substantially increase the number of new projects providing affordable housing options to farmworkers.

Conclusion

Improving farmworker health does not rest solely with the healthcare organizations working in the farmworker community. Health is impacted by a variety of quality of life factors, and chief among these are the living conditions in which farmworkers find themselves. Safe, decent, affordable housing can reduce the incidence and spread of disease, reduce the likelihood of household accidents, and improve household stability, especially for children.

Increased funding for the RHS Section 514 and Section 516 programs is an essential step to developing new projects that will serve farmworkers with the lowest incomes. Greater coordination among RHS,

DOL, and HUD can generate tremendous resources to build new farmworker housing and maintain the quality of existing farmworker housing.

If farmworker housing development benefits from interagency collaboration, farmworkers' overall quality of life can also be enhanced by greater collaboration among different farmworker service networks. For example, farmworker housing developers are hampered by a lack of information on farmworker housing needs in their locales. Health care organizations with outreach workers, for example, could conduct housing needs assessments as they perform their outreach duties. New farmworker housing projects can also serve as the locus for area service provision to farmworkers. Community rooms can be used for classes or as computer centers, daycare can be provided onsite, and projects can serve as well-known central meeting places between outreach workers and their clients. Given the magnitude of economic and social needs among farmworkers, housing initiatives can play a valuable role in improving the quality of life for the farmworker community.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Recruitment, Retention and Training of Bilingual / Bicultural Staff

by

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Monograph no. 9

Recruitment, Retention and Training of Bilingual/Bicultural Staff

BY

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The new millennium has brought about significant changes in the demographic make-up of the United States, where increasing diversity is seen in the nation's population in terms of race, ethnicity, national origin, and language.

In the last part of the twentieth century, major population shifts took place in the United States. The proportion of persons from what have been traditionally called minority populations – African-Americans, Native Americans, Hispanic/Latinos, and Asian-Americans – grew rapidly. Among these, Latinos are the fastest growing minority population in the United States. Demographers estimated that in the 1990's Latinos would become the country's largest ethnic/racial population, and that in the two decades between 1990 and 2010, Latinos will constitute 42% of the country's population growth (Molina and Aguirre-Molina, 1994).

Lessons from the 2000 Census

These estimates were recently confirmed by the Federal government's 2000 Census. According to the Census Bureau, a 58 percent increase in the Hispanic population occurred between 1990 and 2000, with the total current population of Hispanics at 35.3 million (USDCN, b). The largest grouping within Hispanics is persons of Mexican origin (20.6 million), followed by Puerto Ricans (3.4 million), Cubans (1.2 million), and ten million Hispanics of other origin, including Central American (USDCN, b).

These new data indicate that Hispanics are approximately 13 percent of the total U.S. population. The 2000 Census puts the African-American population at 12. 9 percent of the total population, Asian at 4.5 percent, American Indian and Alaska Native at 1.5 percent (USDCN).

Moreover, these striking numbers may be a great underestimate. While the U.S. Census notes 35.3 million Latinos in the U.S., or 13 percent of the total population, experts deem the number to be several million higher; many Latinos have not traditionally been counted because of undocumented ("illegal") status (Molina and Aguirre-Molina, 1994). This issue is not limited to urban areas; many of these Latino immigrants are migrant farmworkers. Latinos are a growing element in rural communities throughout the United States, along with growing Native American and Asian rural populations, presenting new needs and new challenges to many rural health delivery systems.

While the Latino population has grown, Latino health status remains consistently poor (Novello, 1991; Council on Scientific Affairs, 1991; Molina and Aguirre-Molina, 1994), constituting a significant part of the health disparities challenge. Additionally, Spanish-speaking persons' dissatisfaction with care has been documented and remains an area of needed attention (Morales, 1999). Numerous health disparities for Hispanics were noted in the proposed Hispanic Health Act of 2000, H.R. 5595 (US Congress, 2000). A recent review of Latino children's health delineates a number of areas where Hispanic children fare below average in desired health outcomes (Zambrana and Logie, 2000).

Cultural Competence and Health Care

With the country's increasing diversity comes a growing need for the delivery of health care and social services that are culturally sensitive and appropriate. This need is present in all aspects of health and social

services, including dental health, mental health, and the delivery of long-term care. To address this need, the concept of cultural competence has been developed, defined broadly as a set of skills that allows individuals or institutions to increase their appreciation of cultural differences and to act sensitivity, appropriately, and respectfully towards different cultures. Implicit in the concept of cultural competence (referred to as cultural and linguistic competence by some) is the provision of services and information in the language of the individual, family, or community.

Increasingly, cultural competence is seen as an indispensable characteristic of health care professionals and the programs they deliver to communities. The U.S. Department of Health and Human Services has promoted the development of cultural competence though numerous initiatives, offering the following definition:

> A set of attitudes, skills, behaviors and policies that enable organizations and staff to work effectively in cross-cultural situations. It reflects the ability to acquire and use knowledge of the health-related beliefs, attitudes, practices and communication patterns of clients and their families to improve services, strengthen programs, increase community participation, and close the gaps in health status among diverse population groups. Cultural competence also focuses its attention on population-specific issues including health-related beliefs and cultural values (the socioeconomic perspective), disease prevalence (the epidemiologic perspective), and treatment efficacy (the outcome perspective) (*Cultural Competence: A Journey, 3*).

Standards for the provision of culturally competent health care services have been drafted by the Office of Minority Health (OMH, 2000). These proposed standards outline ways in which clinical and social services need to function in order to assure appropriateness of services. At the same time, President Clinton's Executive Order Number 13166 of August 11, 2000, called for the establishment of plans in all federal agencies for how they would meet the needs of LEP, or Limited English Proficiency, populations they serve. The Department of Health and Human Services was the first to develop such a plan, issued August 30, 2000.

Cultural competence is gained through numerous mechanisms, including training, the participation of members of the community, careful community assessment, and informed evaluation of communication methods and tools. A culturally competent program will have culturally competent staff, culturally relevant materials, and culturally appropriate methods. For example, a culturally competent program targeting Indochinese mothers for prenatal care will have staff who are culturally sensitive to the population (if not from it) who speak Laotian, Hmong, Vietnamese, or Cambodian; will be mindful of the role of cultural practices in women's lives and beliefs; and will have culturally appropriate activities for children at its events.

The 1998 Presidential Initiative to End Racial and Ethnic Disparities in Health has given rise to a critical examination of many aspects of health care delivery in the United States (Goodwin, 2000). Among these are the formal training and the racial/ethnic composition of the health care workforce (AAP, 1999b). The development of the Healthy People 2000 objectives regarding health access further articulates what is needed in the health care workforce in order to make access possible for all (Agency of Health Research and Policy, 1999).

The development of a racially, ethnically, and linguistically diverse health workforce is a crucial element in providing culturally competent health care and in the realization of health care access. Unless the health workforce is able to communicate with and serve the increasingly diverse U.S. population, barriers to access will persist (Johnston,1998). The development of cultural competence is a necessary step in the creation of an effective health workforce that can increase access and ultimately reduce disparities (Denboba, 1998; DHHS, 1998; OMB, 2000).

Cultural Competence and Migrant Farmworker Health

Changing economic and social realities have greatly affected the face of the migrant farmworker population in the United States. Today, most farmworkers are foreign born, and many speak only Spanish, according to the National Agricultural Workers Survey (Villarejo and Baron, 1999). As many as a third of today's migrant farmworkers may be working in the U.S. with-

out legal authorization or status (Ibid.), leaving them especially vulnerable and extraordinarily cautious about interactions with public agencies and officials.

The need for migrant health care workers who speak a language other than English has never been greater. The provision of migrant health services by bilingual, bicultural health care providers is essential for the realization of health care access for migrant farmworkers.

This point has been made numerous times by the National Advisory Council on Migrant Health (NACMH, 2000) and by a recently published NIOSH report (NIOSH, 1999). Farmworker access to care will be limited if the health workforce attending them is ill-equipped linguistically, culturally, and in terms of an appreciation of what migrant farm work entails.

Gaps in Cultural Competence Regarding Farmworkers

Numerous efforts have helped to develop and refine the theory and practice of cultural competence (Voelker, 1995; Lockhart, 1997; Denboba, 1998; Johnston, 1998; DHHS, 1998; AAP, 1999a; Carillo, 1999; Flores, 2000). As mentioned, the Centers for Disease Control and Prevention Office of Minority Health are taking the lead in a process of developing national standards (OMH, 2000).

However, the features of cultural competence pertinant to migrant farmworkers are distinct and unique, and flow from the conditions of life that farmworkers face. Cultural competence regarding farmworkers includes, but is not limited to, the following areas of knowledge or skill: sensitivity to limited literacy; awareness of the scope and types of occupational exposures; awareness of the environmental conditions, including substandard housing, exposure to pesticides, and constant motor vehicle travel; appreciation for the constant moving which makes application for health benefits nearly impossible; and awareness of and sensitivity to the problems associated with undocumented status.

Because the migrant labor force is made up of many Spanish-speaking workers, it is essential that Spanish language ability be a central characteristic of the migrant health workforce. In areas where a language other than Spanish is spoken, such as among Haitians or Indochinese farmworkers, migrant health workers must be conversant in those languages. Bilingual and/or bicultural migrant health care workers are needed to perform an array of clinical services, including mental health and oral health services. In addition, bilingual/bicultural workers are needed for outreach work, which will inform migrant farmworkers of the services available to them at migrant health clinics. Because many farmworkers are not used to the ways of the U.S. health care system and may be wary of using services because of their immigration status, the use of outreach workers in farmworker communities is extremely important. This can be especially true with health services that have built-in challenges of potential social stigma such as mental health, substance abuse, and HIV prevention services.

Recommendations for Developing and Maintaining a Culturally Competent Migrant Health Workforce

Numerous steps can be taken to improve upon the training of the current migrant health workforce and ensure that it is adequately prepared to work with farmworkers. These steps involve increasing collaboration among national agencies serving non-English-speaking people, removing barriers to obtaining health care training for non-English-speaking persons, enhancing the cultural competence of all health care providers, and developing research to better understand the migrant health workforce.

Recommended implementation strategies include:

1. Promote linkages among and between Hispanic and other minority health agencies and initiatives.

Many national organizations and initiatives focus on Latino/Hispanic health and on the health concerns of other minority groups such as African-Americans, Asians, Haitians, and Native Americans. These organizations and initiatives, such as Health Resources and Services Administration (HRSA)'s Hispanic Health Initiative, the Latino Caucus of the American Public Health Association, and the Society for the

Advancement of Chicanos and Native Americans in Science, are key linkages that migrant health advocates, trainers, and educators need to make. By sharing knowledge, resources, and ideas, these organizations can help to recruit, train, and retain bilingual/bicultural persons in the migrant health workforce.

2. Develop medicine, dentistry, nursing, public health, mental health, and allied health pipelines for Hispanic and other minority students.

It is essential to develop mechanisms for building awareness of health career opportunities in Hispanic and other minority communities, as well as to recruit and support Hispanic and other minority students' application and matriculation to medicine, dentistry, public health, mental health, and allied health programs. Special pipelines that target Hispanic youth are needed, beginning as early as elementary and middle school.

One such pipeline program available today is HRSA's Health Careers Opportunity Program or HCOP, which is designed to bring educationally and economically disadvantaged students into health careers, building interest as early as elementary school. The HCOP Program should be expanded to target rural Hispanic populations, with an emphasis on migrant farmworkers. A targeted program would both recruit and mentor Hispanic students in general, and make special efforts at recruiting former farmworkers and children of farmworkers from any ethnic group.

3. Student loan repayment/forgiveness programs for those who serve in the migrant health workforce.

At present, student loan forgiveness programs are available to a number of professions for service in communities where it has been historically difficult to recruit personnel. For example, physicians, police officers, teachers, and family and child agency workers are all eligible for loan forgiveness programs, making training for these careers much more financially feasible.

A loan forgiveness program for people who serve in a migrant health clinic, or in some other capacity in the migrant health workforce, could provide loan repayment relief for a period of service. This would make it possible for a person with limited financial resources to seek professional training, which otherwise would saddle them with at least a decade of extensive student loan debt. With a loan forgiveness program in place, academic training programs in public health, nursing, dentistry, allied health and social work would have greater appeal to these individuals, and would help assure a diversified workforce in migrant health.

4. Inclusion of cultural competence training requirement in health care professional curricula.

At present the country's medical, dental, mental health, allied health, and public health schools are only beginning to require training in cultural competence. Such training is increasingly seen as essential to health provider training. By making cultural competence training a requirement in health care provider curricula, the health care workforce will be enhanced and its capacities increased. Within the required course or module, specifics of migrant farmworker health and welfare could be explored, expanding the ranks of persons prepared to work with migrant farmworkers.

5. Language training for health care providers.

Similarly, it is urged that all persons entering health care training programs be encouraged and enabled to gain additional language skills, with a particular emphasis on Spanish. Introductory courses in medical applications of Spanish should be available in allied health, dentistry, medical, nursing and public health schools.

6. Research on the migrant health workforce.

Not enough is known about the training needs of the current migrant health workforce. Research needs to be conducted that examines numerous areas, including:

- Current training regarding migrant health available in health professional schools,
- Gaps in cultural competence in current migrant health staff,
- Employment performance standards for migrant health employees, and
- Mechanisms and models needed for inclusion of former migrants in the health care workforce.

Conclusion

There are numerous steps that can and must be taken to meet the current challenge of developing a bilingual/bicultural migrant health workforce that can provide culturally competent care to farmworkers. Embarking on these steps will ensure that the migrant health workforce required to adequately address farmworker health needs will be developed, enhanced, and retained.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

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Monograph series

Migrant Health Issues

Child Labor

by

Shelley Davis, J.D.
Co-Executive Director
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MIGRANT HEALTH

Monograph no. 10

CHILD LABOR

BY

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Child labor has been a feature of American agriculture since the birth of the nation. Yet few legal protections exist to safeguard the health and well-being of young farmworkers. Exposure to pesticides, transportation accidents, tractor rollovers, unguarded machinery, open irrigation ditches, and animals are among the most serious workplace hazards they face. Farm work is one of the three most dangerous occupations in the United States. With large numbers of youth suffering fatal and nonfatal injuries in agriculture, both public health interventions and increased legal protections are needed to address this problem.

While the children of farm owners or operators often engage in work activities on farms, this paper focuses on two groups of migrant and seasonal workers who perform farm work: unaccompanied minors who are hired to do farm work and children of adult farmworkers who work alongside their parents.

A Demographic Snapshot of Young Hired Farmworkers

The exact number of migrant and seasonal workers under age 18 is not precisely known because of gaps in the available data. The Census Population Survey (CPS) March supplement includes all 15-17 year olds, whether paid or not, who have done agricultural work within the past 12 months. This publication reports 290,000 15- to 17-year-old agricultural workers (USGAO, 1998:22). By contrast, the U.S. Department of Labor's National Agricultural Worker Survey (NAWS), which counts 14 - 17 year old workers employed in crop agriculture, only found there to be 128,500 such workers. Since children under the ages of 14 and 15 can work legally on a farm, both the CPS and NAWS undercount the number of children working in agriculture.

Hired child workers fall into two categories. Some are accompanied by their parents, who are themselves hired farmworkers. Fifty-five thousand others, according to the NAWS, are living and working apart from their parents. Some in the latter group are totally on their own, while others are accompanied by a friend or relative from the home community.

Unaccompanied youth are amongst the most vulnerable children working in agriculture (Mines,1997, p. 21). Approximately 40,000 of these young workers are foreign-born, and 85 percent are male (Mines, 1997, p. 22). The great majority of unaccompanied children (87 percent) live without any relatives. Their levels of income and education are also very low. Specifically, foreign-born young workers have a median annual personal income of between $1,000 and $2,500. Even when their income is added to that of the relatives with whom they share expenses, the combined total is only between $2,500 and $5,000 per year. More than half of these children have less than a sixth-grade education.

One third of unaccompanied children are American-born. Their personal annual income is no greater than

that of their foreign-born counterparts, but when it is combined with that of relatives with whom they share expenses, the total is much higher: $10,000 to $12,500. In addition, more than half of these young workers have not completed tenth grade or beyond.

The other main category of working children is those who accompany their parents to work. According to the NAWS, about 15 percent of farmworker children, from ages 10 through 17, do farmwork themselves (Mines, 1997, p. 16).

Work Performed by Young Hired Workers in Agriculture

According to NAWS, about 40 percent of young agricultural workers work at harvesting tasks (USGAO, 1998, p. 25). These are physically demanding and repetitive jobs that require bending, kneeling, stooping, climbing ladders, and/or carrying heavy bags or buckets containing more than 50 pounds of picked fruits or vegetables. These activities frequently require the harvesters to work with their arms above shoulder level or to move their hands and wrists in repetitive motions (Villarejo and Baron, 1999, p. 622).

A 13-year-old Hispanic migrant worker described his work in testimony before Congress in 1991. He harvested strawberries in California six days per week, from 6:30 a.m. to 8:00 p.m.

> "I stoop, moving up and down the rows of strawberry plants, looking for good berries and then placing them in a packing box. I move my cart up and down the field ... At the end of the day, our backs hurt and we are tired" (U.S. House Committee on Government Operations, 1992, p. 26).

There is no limit under federal law to the number of hours per day or per week that children may work in agriculture. As a result, the hours worked are often long. Children ages 14 through 17 work an average of 31 hours per week in agriculture. While the long hours are due in part to the imperative of harvesting crops when they are ripe, long hours are also attributable to the fact that farmworkers are not entitled to overtime pay under the Fair Labor Standards Act. As a consequence, employers have no financial incentive to limit the work week to 40 hours.

Outside of school hours, federal law imposes no limit on the time of day that children can work in agriculture. Consequently, some of their work is done early in the morning or late in the evening. Sheer weariness can lead to injuries. In 1992, 14-year-old Joel Compos was killed when he fell asleep at 2:30 a.m. in a Washington field and was run over by a truck (San Diego Union Tribune, June 21, 1992).

Long hours and work done in the early morning and evening adversely affects the health and well-being of young workers. Because of the time and effort consumed by work, many have difficulty doing school work and/or getting adequate rest and nutrition. As a consequence, some perform poorly in school and others drop out.

Injuries to Young Workers

Limited data is available on injuries to young hired migrant and seasonal farmworkers. In 1985, in a groundbreaking study, Frederick Rivara found that children who live and work on farms suffer nearly 300 fatal injuries and 23,500 nonfatal injuries each year. In a follow-up study published 12 years later, using the same data sources (Rivara, 1997), Rivara found that the annual incidence of fatal injuries for farm children had decreased by 39 percent, from 13.2 per 100,000 in 1979-1981 to 8.0 per 100,000 in 1991 - 1993, whereas the annual incidence of nonfatal injuries increased 10.7 percent, from 1,551 per 100,000 in 1979-1983 to 1,717 per 100,000 in 1990-1993.

Rivara's work on fatal injuries is particularly instructive because it reflects an actual death certificate count, rather than a sample survey. In the 1985 study, Rivara relied on tapes reporting information from death certificates received by the National Center for Health Statistics (NCHS) from all states and the District of Columbia. From these NCHS tapes, Rivara extracted all information on deaths of individuals 19 years of age and younger from external causes that occurred on a farm (including farm homes). He did not count

motor vehicle fatalities, however, because they could not be separated as to place of injury. Rivara's count of fatal injuries is both underinclusive and overinclusive of employment-related deaths. By excluding all motor vehicle deaths, Rivara significantly undercounts the number of employment-related deaths arising in agriculture. But by counting deaths in the farm home, his number includes some fatalities that could have occurred in any home.

Rivara's count of nonfatal farm injuries is based on the National Electronic Injury Surveillance System (NEISS) maintained by the federal Consumer Product Safety Commission (CPSC). This is a surveillance system of nonmotor-vehicle-related injuries in the United States involving consumer products, without regard to where the injury occurred. Rivara recognized the limitations of the NEISS data. First, there is a question about whether the sample of emergency rooms used is adequate to estimate injuries on farms. The sample, he notes, does not necessarily reflect hospitals located in rural areas. Second, the sample includes only injuries treated in hospital emergency rooms. This approach is likely to result in a considerable undercount, because a study of nonfatal farm injuries in Ontario shows that only 28 percent of farm injuries are treated in the emergency room and only 68 percent of all farm injuries receive any medical care at all (Pickett et al., 1995). Third, the NEISS database includes only product-related injuries, thus excluding many other kinds of injuries on the farm, such as injuries due to farm animals, drowning in natural bodies of water, and falls.

Rivara offers several explanations to explain the trends he discerned. Noting that nearly half of children who die from farm accidents now die in hospitals compared with only 15 percent in the 1985 study, he points out that emergency medical services have improved substantially for farm injuries. Another improvement is better regionalized trauma care.

Rivara also notes that rollover protective structures (ROPS) have reduced tractor fatalities, which were a principal cause of farm deaths. Since ROPS were only required by federal regulations to be installed in tractors manufactured after 1976 (29 C.F.R. § 1928.51(b)), many fewer tractors had such protective devices at the time of the earlier study than at the time of the later one. To account for the 10.7 percent increase in nonfatal injuries, Rivara points to the lack of child care options and the fact that some children are allowed to ride on tractors and other farm machinery despite the danger.

Rivara's 1997 study listed machinery as the leading cause of deaths (34.1 percent) followed by drowning (24.1 percent), and firearms and explosives (14.8 percent). With regard to nonfatal injuries, lacerations and punctures were the leading types of injury (37.6 percent), followed by contusions, abrasions, and hematomas (23.3 percent) and dislocations and fractures (19.5 percent).

The Census of Fatal Occupational Injuries (CFOI) data for the Agriculture, Forestry, and Fishing Industry, for the period 1992 through 1995, were analyzed. (Murphy and Yoder, 1998). The percentage of all farm deaths attributed to employees who were ages 19 and younger - 5 percent of all farm deaths - appears to the researchers to be too low. They offer several reasons why this is so. Children ages 14 and younger are not normally viewed as having an "occupational" status, and as a result the Industry and Occupation categories on their death certificates are often left blank and/or filled in as "Student." Nor are workers' compensation reports a good source of information about farmworker fatalities because many farmworkers are not covered by these systems and unpaid child workers are especially unlikely to file claims or receive benefits.

Another researcher analyzing the same CFOI data as Murphy and Yoder found that young farmworkers

(excluding managers) led all youths in job-related fatalities (Derstine, 1996). In nearly one third of these deaths (32.2 percent), the cause was a non-highway vehicular incident, such as a youth operating or helping to operate a tractor.

More detailed data about risk factors have come from studies of groups at the state level or at a specific hospital or emergency room. One such study (Heyer et al., 1992), using workers' compensation data, focused on hired farmworkers under age 18 who filed claims for occupational injuries in Washington State from 1986 to 1989. Because there was no information on the number of farmworkers under age 18 who were covered by the Washington workers' compensation law, Heyer et al. had no "denominator" data from which to calculate an incident rate. Instead, he compared the data on workers' compensation claims filed by young agricultural workers to the claims data for minors working in the food service industry. The Heyer study's most notable finding was that 26 percent of the claims filed by young farmworkers were for serious or disabling injuries, whereas only 13 percent of the claims filed by young food service workers were for serious or disabling injuries.

A California study (Schenker, et al., 1995) reviewed death certificates for farm-related deaths from 1980 to 1989 to children under age 15. The study excluded deaths occurring in a farm residence or traffic accidents. The single leading cause of death, resulting in 30 percent of all fatalities, was farm machinery, particularly tractors. Next, at 23 percent, was non-traffic motor vehicle deaths (including off-road vehicles). Animals caused 13 percent of deaths, and drownings accounted for 10 percent. Schenker and his associates also analyzed the sex and ethnicity of the young victims, and found that boys were three times more likely than girls to die in farm accidents. The increased danger to boys has been found in other studies as well (Cogbill et al., 1985; Swanson et al., 1987; Salmi et al., 1989). The Schenker study also disclosed that the death rate for Hispanic boys in California was 70 percent higher than for non-Hispanic boys.

Absence of Adequate Legal Protections

Despite the documented hazards of agricultural employment, the legal protections for children working in agriculture are significantly less than those for children working in other industries. At the federal level, child labor is regulated by the Fair Labor Standards Act (FLSA). Under the FLSA, the normal minimum age at which children can work in agriculture is 14, whereas in all other industries it is 16. In occupations that the Secretary of Labor has determined to be particularly hazardous (such as operating a chain saw), the FLSA raises the minimum age in agriculture to 16, but in all other industries it is 18. As a result, a child can apply toxic pesticides on a farm at 16, but could not apply the same pesticides on a golf course until age 18. The Labor Department's hazardous occupation orders do not apply at all to a child who works on a farm owned or operated by his or her parents.

In other industries, the Secretary of Labor may permit 14- and 15-year-olds to work if the Secretary "determines that such employment is confined to periods which will not interfere with their schooling and to conditions that will not interfere with their health and well-being." Applying this standard, the Secretary has authorized 14- and 15-year-olds to work in the retail, food service, and gasoline service station industries, but only if the work hours are (1) outside school hours, (2) not over 40 hours a week during non-school weeks, (3) not over 18 hours a week during school weeks, (4) not over 8 hours a day on non-school days, (5) not over 3 hours a day on school days, and (6) between 7 a.m. and 7 p.m. (expect for June 1 through Labor Day, when the evening hour is extended to 9 p.m.). In agriculture, the only one of these six requirements applies: farmworkers who are 14- and 15-years old can only work outside of school

hours. As such, these children can work before or after school or unlimited hours when school is not in session.

In agriculture, unlike in any other industry, children under 14 years old are authorized to work in certain circumstances. Specifically, a 12- or 13-year old child can work on a farm with the consent of a parent, or if the parent is employed on the same farm. A child even younger than 12 years old can work on a farm if the farm employs fewer than 7 full-time workers or if the farm is owned or operated by the child's parent. And finally, 10- and 11-year-old children can work up to eight weeks per year as hand-harvest laborers doing piece-rate work, with the written permission of the Department of Labor.

A majority of states provide some additional protections to children working in agriculture. For example, 27 states set standards respecting the number of hours per day and per week that minors employed in agriculture may work. Some states also forbid work in agriculture during certain hours, typically early in the morning or late in the evening, much like the federal restrictions that apply to the retail, food service, and gasoline service station industries. However, in the absence of adequate federal protection, the state laws provide only a patchwork quilt of hit-and-miss safeguards that would be available to some young workers on some occasions, but leave many unprotected.

Recommendations

Efforts should be made to improve the earning power of adult farmworkers to reduce the dependence of farmworker families' on the income of working children. Programs should also be initiated to encourage farmworker teens to remain in school and pursue higher education. Safety training programs should be devised to teach young agricultural workers how to perform farm labor tasks safely in order to reduce the number of fatal and non-fatal injuries.

Produced for the National Advisory Council on Migrant Health by the National Center For Farmworker Health, Inc., Buda, TX, October 2001.

Copies may be obtained through the following sources:

National Center for Farmworker Health, Inc., Buda TX
Phone: (512) 312-2700
http://www.ncfh.org

Migrant Health Branch, Bethesada, MD
Bureau of Primary Health Care
Phone: (301) 594-4300
http://bphc.hrsa.gov/migrant/

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